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IN THE

Supreme Court of the United States

OCTOBER TERM, 1963

No. 204

UNITED STATES OF AMERICA, Appellant,

ALUMINUM COMPANY OF AMERICA and ROME CABLE CORPORATION

On Appeal from the United States District Court for the Northern District of New York

BRIEF FOR APPELLEES

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BRIEF FOR APPELLEES

QUESTIONS PRESENTED

The Government's statement of the Questions Presented is argumentative and misleading.

First. The Government's characterization of the competitive effect issue as "primary" and the line of commerce question as only "subsidiary" is presumptuous and unwarranted. Both are equally important in a Section 7 case; as this Court has said, "[d]eter-

mination of the relevant market is a necessary predicate to a finding of a violation of the Clayton Act... Substantiality can be determined only in terms of the market affected." The district court, relying on extensive industry testimony and supporting documentation, found that the Government had not sustained its burden of proof on line of commerce. The Government's task on appeal cannot be lessened by calling this crucial threshold question "subsidiary."

Second. The Government's statement of the alleged "primary question" distorts and obscures the facts pertaining to this acquisition. While Aluminum Company of America (Alcoa) is the largest producer of aluminum conductor wire and cable, it is such solely by virtue of its leading, though steadily declining, position in the manufacture of bare aluminum wire and cable.2 Rome Cable Corporation (Rome) was primarily (more than 90 per cent) a manufacturer of copper products. Far from being a "significant" fabricator of bare aluminum conductor, it was de minimis, with a 3 per cent market share, and the Government does not appeal from the district court's conclusion that the required anticompetitive effect was not shown with respect to bare aluminum conductor. With regard to insulated aluminum wire and cable,

¹ United States v. E.I. duPont de Nemours & Co., 353 U.S. 586, 593, (1957); quoted in Brown Shoe Co. v. United States, 370 U.S. 294, 324 (1962).

² It should also be noted that the fact that Alcoa may be the largest producer of primary aluminum is not germane to the issues raised by this appeal. The Government's claim that this acquisition may substantially lessen competition in the sale of aluminum ingot used in the production of wire and cable was rejected by the district court (Concl. 7, R. 1303), and no appeal has been taken from that ruling.

Alcoa was not the "largest producer" but ranked third, with 11.6 per cent in 1958. Rome, with 4.7 per cent, ranked eighth or ninth. In short, in the bare field, where Alcoa was "largest," Rome was not "significant"; in the insulated field, where Rome was not de minimis, Alcoa was not "largest." Finally, the Government's assumption that this acquisition occurred in "an already oligopolistic market" is contrary to the court's finding that there is vigorous competition in the sale of aluminum wire and cable products (Fdg. 62, R. 1295).

More objectively stated, the questions presented are these:

- 1. Whether the district court erred in finding that
 (a) insulated aluminum wire and cable and (b) aluminum conductor wire and cable were not proper lines of commerce within the meaning of Section 7 of the Clayton Act.
- 2. Whether the district court erred in finding that the Government had failed to prove that Alcoa's acquisition of the assets of Rome may substantially lessen competition or tend to create a monopoly in the manufacture and sale of either (a) insulated aluminum wire and cable, or (b) aluminum conductor wire and cable, assuming each to have been established as a proper line of commerce.

APPELLEES' COUNTERSTATEMENT

This is a direct appeal from the judgment of the district court holding that Alcoa's acquisition of Rome did not violate Section 7 of the Clayton Act (15 U.S.C.

³ Where appropriate, assertions in the Government's Statement that we believe to be inaccurate or misleading will be dealt with in the Argument rather than in this Counterstatement.

18). The Government does not challenge the district court's findings of fact as "clearly erroneous" (Rule 52(a) F.R. Civ. P.), but urges that its ultimate findings on the line of commerce and competitive effect issues involve an erroneous interpretation of the statute. The appeal is limited to two alleged aluminum conductor lines of commerce: (1) insulated aluminum conductor, and (2) aluminum conductor, which is a composite of bare and insulated aluminum conductor products.

I. THE BACKGROUND OF THE ACQUISITION

The district court found that this acquisition was undertaken by Alcoa "in the face of its declining market" (Opin., R. 1333), for the purpose of obtaining insulating know-how and diversification needed "to overcome a market disadvantage . . . " (Opin., R. 1321). It described the acquisition as "the combination of an aluminum and an essentially copper manufacturing company" (Opin., R. 1333), and found that Alcoa and Rome had competed in the sale of only three aluminum conductor products (Opin., R. 1314), that "there was not substantial or significant competition between [them] in the sale" of these products (Fdg. 52, R. 1294), and that Rome's manufacture of aluminum products "did not induce [the] acquisition" (Fdg. 7, R. 1284). These facts, not challenged by the Government, provide the background for the acquisition.

(a) Alcoa's Declining Market Position

Alcoa's pre-World War II monopoly, Judge Hand's landmark decision, and the Government's post-war policies that fostered competition in the aluminum business, all are acknowledged historical facts. But

⁴ United States v. Aluminum Company of America, 148 F. 2d 416 (2d Cir. 1945).

the Alcoa monopoly ended nearly a quarter of a century ago. Since then, Kaiser and Reynolds have "removed all reasonable doubts as to their capacity to effectively compete with Alcoa . . ," three additional primary producers—Ormet, Inc. (Ormet). Harvey Aluminum (Harvey), and Anaconda Aluminum Company (Anaconda)—have entered the field, and Aloca's position has shrunk significantly. In short, the Alcoa of the 1960's is not the Alcoa of 25 years ago.

In terms of percentage of primary aluminum production, the court found that Alcoa had "declined sharply" and with reasonable consistency, from 52 per cent of domestic output in 1948, to 45 per cent by 1956, and, by an additional 9 percentage points, to 36 per cent in 1960 (Opin., R. 1312-13). In addition, there are substantial quantities of foreign aluminum, including Canadian production, which "in 1960 amounted to more than 1.5 billion pounds, or more than 35 per cent of total U.S. primary aluminum production" (Fdg. 64, R. 1295; Opin., R. 1312). Alcoa's post-war decline is also reflected in the drop in its return on invested capital, which fell from 9.3 per cent in 1950 to 3.7 per cent in 1961 (Opin., R. 1321+R. 1066).

⁵ United States v. Aluminum Company of America, 153 F. Supp. 132, 171 (S.D.N.Y. 1957). If the Government's gratuitous statement that Alcoa made its first attempt to acquire Rome twelve days after this decision (Govt. Br., p. 3, n. 1) is intended as a statement of cause and effect, it is wholly without support in the record.

The court found a substantially similar decline with respect to capacity (Opin., R. 1313).

⁷ Comparable declines were experienced in Alcoa's return on gross revenue, which declined from 9.7 per cent in 1950 to 5 per cent in 1961, and in its return on shareholders' equity, which declined from 13.7 per cent in 1950 to 5.6 per cent in 1961 (R. 1065-66).

Alcoa has suffered at least equally substantial declines in aluminum wire and cable. It pioneered the use of aluminum as a substitute for copper in the electrical wire and cable field, and sold substantially all of the bare aluminum cable used for electrical transmission in the United States prior to World War II. (Opin., R. 1313). While Alcoa is still the number one producer of bare ACSR and aluminum cable,8 it now faces competition from 10 or 11 other suppliers and "its relative participation in the [bare aluminum conductor] market has declined materially" (Opin., R. 1313, 1323). This decline was "reasonably consistent" beginning in 1954, the first year for which data are available, "and continuing since the acquisition" (Opin., R. 1313). Thus, Alcoa's percentage declined from 48.4 per cent in 1954, to 32.5 per cent in 1958, and, combined with Rome, to 26.1 per cent in 1961, more than 6 percentage points less than Alcoa alone in 1958 (Ibid.). Overall, the 7-year period from 1954 to 1961 saw the Alcoa percentage fall by more than 45 per cent.

On the basis of these downward trends in Alcoa's market position and rate of return, and the increase in number and size of its competitors, the district court found that Alcoa did not occupy a dominant position in either primary aluminum or aluminum wire and cable (Opin., R. 1326-27).

^{*} ACSR consists of a high tensile strength steel core, surrounded by hard drawn aluminum wires. Aluminum cable, bare, is generally similar to ACSR but does not have the high tensile strength steel core. Both products are sold for use by electric utility companies in the overhead transmission and distribution of electric power and energy (R. 630-36; AR 12, R. 3246; AR 13-13a, R. 3247-48; AR 14-14a, R. 3249-50).

(b) Alcoa's Market Disadvantage

Alcoa's pioneering role, its continued—though steadily declining—leadership, and the research activities, "outstanding" technical service, and line of accessory and complementary products referred to by the Government (Govt. Br., pp. 6-7), all pertain exclusively to bare aluminum conductor products. Alcoa has never even approached a position of leadership with respect to insulated products.

As recently as 1952, Alcoa was totally without insulating capability and thus was "in an unfavorable market position" to meet the increase in demand for covered or insulated aluminum products (Opin., R. 1313; R. 1077-78). As a partial solution, it entered into a tolling arrangement under which Rome made two comparatively simple products, aluminum covered line wire and multiplex cable," for Alcoa's account (R. 1078, GX 28, R. 1536-37). Selling exclusively products insulated for it by Rome, Alcoa, in 1955, accounted for 10.8 per cent of insulated aluminum shipments, ranking third behind Kaiser, with 26.5 per cent,

[•] Covered line wire (also referred to as weatherproof) consists of a conductor (copper or aluminum) covered with a synthetic rubber (neoprene), thermoplastic (polyethylene), or fibrous covering. It is used in the distribution of electric power and energy in primary and secondary overhead lines and in service drops from the utility pole to a building (See R. 636-40; AR 12, R. 3246; AR 14-14a, R. 3249-50; AR 15-15a, R. 3251-52; AR 25, R. 3267-81; AR 26, R. 3282-3304).

Multiplex cable consists of one, two or three insulated conductors (copper or aluminum) twisted around an uninsulated conductor which acts as a neutral and also provides mechanical support. It is used as a self-supporting secondary distribution line and as a service drop from the utility pole to a building (See R. 636-40; AR 12, R. 3246; AR 14-14a, R. 3249-50; AR 15-15a, R. 3251-52; AR 27, R. 3305-21; AK 28, R. 3322-43).

and Anaconda, with 18.2 per cent (Gx 436, R. 2717). Its percentage remained at about this level until the acquisition.

Alcoa's interest in acquiring Rome did not arise from a desire to increase its capability or capacity for the manufacture of aluminum covered line wire and multiplex cable (R. 1083-1123). In 1956, it had begun to make its own polyethylene covered line wire and multiplex (Gx 146, R. 2097-98), and by the time of the acquisition, although it had not yet installed neoprene facilities, Alcoa was in a position to satisfy its requirements of polyethylene and neoprene covered line wire and multiplex (R. 1122-23). It, however, still "lacked the 'know-how' to manufacture the more complicated types of insulated wire and cable" (Opin., R. 1321) and, therefore, as the Government concedes, "could not offer eustomers a full line of its own insulated products, both aluminum and copper, as could certain of its competitors" (Juris. State. 9-10).

Alcoa attributed its sharp decline in bare aluminum, in part, to its inability to supply a full line of insulated products including copper products. Many of the companies which had entered the bare aluminum cable field had broad wire and cable experience, e.g., Anaconda, General Cable, Essex, Southwire, Nehring and Central, and thus, were "in the more healthy position, being able to produce both bare aluminum and the insulated copper" (R. 1055-56; R. 1080). Kaiser's acquisition of the Bristol plant of United States Rubber created another "dual roler," i.e., a company with the capability of producing both bare aluminum and insulated copper products (R. 1081; Gx 161, R. 2179). It was Alcoa's need for comparable product diversity, not "Rome's manufacture of aluminum products," that

induced the acquisition (Fdg. 7, R. 1284; Opin., R. 1321).

Alcoa first approached Rome in October 1957, offering Alcoa stock valued at about \$24 million (R. 951-52; Gx 165, R. 2190). When this was rejected, Alcoa sought advice from Ebasco Services, Inc., a management consulting and engineering firm with special competence in the utility field (R. 1103-04). Ebasco confirmed the correctness of Alcoa's decision to diversify its line of electrical conductors (R. 1060), advised Alcoa against trying to establish its own insulating division (R. 1104-05), and made approaches on Alcoa's behalf to six companies (R. 1106), none of which was more than a de minimis producer of aluminum conductor products (R. 1087-88).

When it looked as if a suitable acquisition could not be made, Alcoa began to consider what would be involved in developing it own insulating organization (R. 1088-89, 1061; Gx 168, R. 2194). A preliminary study indicated that a "rounded out program" covering a reasonably broad range of insulated products would require a minimum of \$35 to \$40 million and would take at least 5 to 10 years (R. 1089-90, 1124-26, 1064). Alcoa's sales vice-president testified that he would not have approved this expenditure (R. 1090; see R. 1064), and the court found that the "time required . . . and the expense involved seemed to foreclose" Alcoa's obtaining insulating competence from within (Opin. R. 1321). 10

¹⁰ The Government's Statement implies that Alcoa, prior to acquiring Rome, had definitely decided to go forward on its own (Govt. Br., pp. 28-29). This is not supported by the record, and is contrary to the findings. The President's letter, relied on by the Government (Gx 168, R. 2194), as well as his testimony at the

It was against this background that Alcoa reopened negotiations with Rome (R. 1061-62, 1091), and, on March 31, 1959, acquired the assets of Rome in exchange for 355,226 shares of Alcoa stock, with a market value of approximately \$34 million (Gx 7, R. 1345; Gx 9, R. 1427; R. 1102). "Alcoa's purpose," the court found,

was to acquire the ability to manufacture the more complicated insulated wire and cable products and diversify its operations. Rome's manufacture of aluminum products did not induce said acquisition. (Fdg. 7, R. 1284).

In short, its objective was "to overcome a market disadvantage rather than to obtain a captive market . . . or to eliminate a competitor" (Opin., R. 1321).11

trial (R. 1061), make clear that he had a twofold purpose in asking for study of internal expansion: first, to enable Alcoa better to evaluate any offer it might want to make in the future, and, second, to develop for the first time the picture as to "what we are headed into if we are going on our own . ." Nor is it correct to say that Alcoa had "worked out plans for a new plant . ." (Govt. Br., p. 29). "It was a very preliminary look, possibly as a place to start from, with a more detailed study" (R. 1126). At the time of the acquisition, Alcoa had no "definite plans to expand its aluminum wire and cable production" (Fdg. 67, R. 1296).

has acquired other producers of aluminum conductor in addition to Rome, or that it was deterred from making additional acquisitions by the pendency of this litigation. (Govt. Br., pp. 7-8). The court found, however, that "aluminum wire and cable products were not involved" in Alcoa's other acquisitions (Opin., R. 1322), and that the Rome acquisition was not shown to have been "part of a continuing program contemplating future expansion through mergers or acquisitions in wire and cable . . ." (Fdg. 11, R. 1284). Having acquired insulating know-how, Alcoa had no interest in buying it twice (R. 1109-11).

(c) The Contrast Between Alcoa and Rome

As would be expected in the case of a diversification acquisition, Alcoa and Rome had essentially different interests and capabilities in the wire and cable business.

Rome's corporate history, assets and sales are set forth with reasonable accuracy in the Government Brief (p. 8).¹² The Government, however, fails to make clear that "Rome was primarily the manufacturer of copper products . . ." (Opin., R. 1314), and substantially overstates the importance of aluminum in its pre-acquisition operations.

The Government states that Rome enjoyed an excellent reputation "because of its broad range of high quality aluminum and copper conductor and accessory products, its high degree of technical skill, and its substantial achievements in research and development" (Govt. Br., pp. 8-9). The implication that aluminum and copper products were of the same or comparable importance to Rome is contrary to the court's finding that "copper was by far the predominant metal used by Rome in its wire and cable operations," accounting for more than 90 per cent of its combined copper and aluminum purchases and for from 90.3 per cent to almost 94 per cent of its total wire and cable sales revenue (Fdg. 18, R. 1286; Fdg. 68, R. 1296).

It is also misleading to imply that Rome had a "broad range" or "diversified line" of insulated alumi-

¹² The Government's Statement, however, could be read as indicating that Rome had three wire and cable plants. In fact, all of Rome's wire and cable products were manufactured in Rome, New York; the Collegeville, Pennsylvania, and Torrance, California, plants produced only cable accessory and conduit products, respectively (Fdg. 16, R. 1285), products not included in the lines of commerce involved in this appeal.

num products, and that its technical skill and research achievements pertained thereto. Aluminum has gained acceptance principally in overhead distribution products, such as weatherproof line wire and multiplex cable¹³ (Fdg. 29, R. 1289). These products are among the "simplest" of all insulated wire and cable products (Fdg. 84, R. 1299; Fdg. 55, R. 1294), and even Alcoa, with its limited experience and insulating capability, possessed sufficient "technical skill" to make them (R. 1122-24). The fact is that Rome's "diversified line" consisted overwhelmingly of products chiefly made from copper, including complex, multiconductor cables, such as those shown in AR 18, R. 3257-58; and it is to these more sophisticated copper products that Rome's admitted technical skill and research facilities apply."

Especially glaring is the Government's statement that Rome was noted "for its outstanding research activities and technical know-how, particularly in the field of insulated aluminum conductors" (Govt. Br., p. 10, emphasis added). Each record reference cited in support of this proposition clearly refers to Rome's insulating ability in general; nowhere in the record is there support for the notion that Rome possessed special insulating know-how with respect to aluminum conductors. Rome's insulating competence may be

¹³ Weatherproof and service drop accounted for 91.1 per cent of Rome's total shipments of insulated or covered aluminum wire and cable in 1959 (Gx 443, R. 2728).

¹⁴ These products unlike weatherproof and multiplex, require the use of varied and sophisticated insulations and protective coverings (R. 651-53; AR 21-24, R. 3263-66), a wide variety of testing equipment and techniques, and engineering and research capability for the design of cables and customer service (R. 658-60).

¹⁵ Significantly, the service drop cable cited as an example of Rome's development work in the insulated conductor field was originally developed as a copper product (R. 936).

used on either copper or aluminum. In fact, however, Rome's "relatively full line of insulated wire and cable products [was] chiefly made from copper" (Fdg. 78, R. 1299).

In contrast to Rome, Alcoa made no copper conductor products and lacked the know-how to make the more complicated insulated constructions that were Rome's forté (Fdg. 78, R. 1299; Opin., R. 1313, 1321). Moreover, where Rome specialized in insulated products, the court found that "bare wire and cable products constituted the great preponderance of Alcoa's sales," amounting to "more than 90 per cent" of its total conductor wire and cable shipments in 1958 (Fdg. 14, R. 1285).

Because of their fundamentally different interests and capabilities, the court found that the two companies were not substantially competitive with respect to either bare aluminum conductor products, Alcoa's chief area of interest, or in the sale of insulated products, chiefly copper, which were Rome's specialty (Fdg. 52, R. 1294; Fdg. 78, R. 1299). With respect to bare aluminum cable, Alcoa, in 1958, had shipments amounting to \$23 million, and accounted for 32.5 per cent of total shipments (Fdg. 21, R. 1286; Fdg. 45, R. 1292). Rome's sales of bare aluminum wire and cable in that year amounted to \$240,000, which was approximately 1 per cent of its total wire and cable sales and only 3 per cent of total shipments (ibid.).

In the insulated field, Alcoa's 1958 shipments of aluminum weatherproof and multiplex cable were valued at \$4.2 million and represented 11.6 per cent of total shipments of insulated or covered aluminum conductor (*ibid.*). Rome's sales of insulated or covered

aluminum products in the same year amounted to \$2.2 million and represented 4.7 per cent of total shipments of insulated or covered aluminum conductor (AR 52, R. 3405; Fdg. 45, R. 1292). As a percentage of total 1958 insulated wire and cable shipments, both copper and aluminum, Alcoa's market share was .3 per cent and Rome's 1.3 per cent (Fdg. 76, R. 1298). Sales of insulated aluminum products represented less than .6 per cent of Alcoa's, and approximately 5 per cent of Rome's total 1958 sales (Gx 16, R. 1484; Gx 22, R. 1496).

2. COPPER AND ALUMINUM IN THE WIRE AND CABLE INDUSTRY

Differences in the physical and electrical properties of copper and aluminum influence their use in the wire and cable industry. The court found, however, that such differences do not establish, and that the industry, itself, does not recognize, separate economic entities confined to insulated aluminum conductor or a combination of bare and insulated aluminum products (Opin., R. 1316; Fdgs. 25-29, R. 1288-89; Add'l. Fdg. 4, R. 1336-37). Thus, the Government's reference to "the aluminum conductor industry" presupposes a separate identity which the district court rejected (Govt. Br., pp. 11, 18).

The most significant differences between copper and aluminum are that aluminum has only about 62 per cent the conductivity, and is only about 1/3 the weight, of copper. This means that pound-for-pound aluminum will provide more conductivity than copper, mak-

¹⁶ Rome's sales of aluminum weatherproof and multiplex cable, the only insulated products also sold by Alcoa, amounted to \$1.7 million. It made the same products out of copper in the amount of \$2 million (AR 56, R. 3406).

ing it appreciably cheaper as a conductor metal (R. 182; Gx 50, R. 1650). At the same time, because an aluminum cable of conductivity equal to copper must be larger in cross-sectional area, this economic advantage begins to disappear as one moves from bare conductor to insulated cables, "the more so as insulations and coverings become thicker and more complex" (Gx 50, R. 1650; R. 216). Moreover, in some situations, even where the cost of insulated or covered aluminum conductor is cheaper than copper, the final installed cost may be greater owing to other economic factors, such as the higher cost of connectors used with aluminum (Gx 50, R. 1650; AR 76, R. 3472).

In the bare cable field, the industry recognizes important distinctions between copper and aluminum. Bare aluminum is not only cheaper than copper, but its physical and electrical properties give it positive technical advantages. For these reasons, bare aluminum has virtually displaced copper (except in seacoast areas) in overhead transmission (Fdg. 24, R. 1288). Moreover, the industry differentiates between bare copper and bare aluminum, manufacturers reporting them to the Bureau of the Census under separate product classifications (Fdg. 24, R. 1288; R. 947). Finally, the manufacture and sale of bare aluminum cable require special stranding equipment, and the engineering skill needed to design long-span, high

¹⁷ For example, aluminum's lighter weight permits the erection of fewer supporting structures and the larger size required to achieve equal conductivity with copper reduces corona loss (R. 161-62).

¹⁸ Products Codes 33571 and 33521 "Aluminum and aluminum-base alloy wire and cable (including ACSR)"; Product Code 33572, "Copper and copper-base alloy wire (including strand and cable, bare and tinned, for electrical transmission)."

voltage transmission lines (Fdg. 24, R. 1288; R. 663, 697-98). For all of these reasons, appellees agreed, and the court found, that bare aluminum cable and ACSR might properly be considered a separate line of commerce (Fdg. 24, R. 1288). The court, however, found no anticompetitive effect in that line, and the Government has not challenged this conclusion on appeal (Concl. 7, R. 1303; Govt. Br. p. 38).

The insulated products which comprise most of the Government's alleged insulated aluminum line of commerce are only two of many produced by the wire and cable industry. This industry "is characterized by vigorous competition" and includes more than 200 companies, among them "many strong, well-financed and highly reputable concerns" (Fdg. 81, R. 1299). In 1958, the industry produced insulated products valued at \$1.3 billion, of which copper conductor products accounted for more than 95 per cent (Fdg. 29, R. 1289).

Insulated aluminum wire and cable, unlike bare, is not recognized by the industry "as a separate economic entity" (Opin., R. 1316). Insulated products are identified and defined by the industry, and reported to Census, in accordance with their function or type, "not according to the metal used as conductor" (Fdg. 25, R. 1288), and manufacturers regard themselves simply as "insulators of wire and cable products, not as insulators of copper wire and cable on the one hand, or of aluminum wire and cable on the other"

¹⁹ For example, authoritative technical manuals (AR 25-28, R. 3267-3343), Rome product bulletins (AR 30-32, R. 3345-60), and the Wire Buyers' Guide, official publication of The Wire Association (AR 73, R. 3439), all define and classify insulated wire and cable products according to their function or type, e.g., building wire, power cable, covered line wire, self-supporting service drop cable, rather than by the metal employed as conductor.

(Fdg. 26, R. 1288). As this implies, and as the court found, there is complete manufacturing interchangeability between copper and aluminum (Fdgs. 27, 55, 56, R. 1289, 1294-95; Opin., R. 1316).20 In addition, wire and cable insulators have flexibility in the products they can make, and a company able to make more complicated products, such as building wire, power cable, control cable, etc., "can readily" make line wire . and multiplex cable, "using either copper or aluminum conductors, with its existing machinery and personnel" (Fdg. 55, R. 1294; Fdg. 84, R. 1299). Such interchangeability among products and conductor metals is of practical competitive importance, for the court found that manufacturers "constantly review their product lines and switch readily from one product or conductor metal to another in accordance with market conditions" (Fdg. 56, R. 1294-95; Fdg. 85, R. 1300).

The larger size aluminum wire required to achieve equal current carrying capacity with copper, tends to make aluminum economically unacceptable in more sophisticated heavily insulated constructions and in applications where space is important (R. 216; Gx 50, 1650). In overhead distribution lines, where cable size is not a limiting factor, the use of aluminum has increased appreciably since about 1950. With the acceptance of aluminum as a copper substitute, the number of manufacturers making insulated aluminum products increased from 4 to 29, "most of the new

The only change required from a manufacturing standpoint is the use of different lubricants and a clean-up of the equipment if both copper and aluminum are used on the same drawing machine. It is customary to draw copper and aluminum in separate cycles of production, or, where volume permits, to use one machine on copper and another on aluminum (Fdg. 27, R. 1288; c.g., R. 73-74, 251, 280, 379-80, 661, 982-83).

entrants [coming] from the ranks of insulated copper conductor producers . . . " (Opin., R. 1323).

Contrary to the Government's contention, aluminum has not "virtually displaced," and is not in the process of "rapidly displacing," copper in insulated or covered overhead distribution lines (Govt. Br., p. 12). This contention will be dealt with more fully in the Argument (infra, pp. 38-45), but it should be noted that the district court found that copper and aluminum are functionally interchangeable in these applications; that buyers consider other economic factors that may offset the lower cost of aluminum cable (Fdg. 28, R. 1289; Opin., R. 1316); that in areas where aluminum has gained "increasing use," there is a "lively competition between aluminum and copper products" (Opin., R. 1312); that the copper-aluminum price difference, and the lack of price sensitivity between them, do not foreclose "actual competition" (Opin., R. 1316); and that, in fact, "substantial quantities" of the copper versions of overhead distribution products are sold (Fdg. 29, R. 1289).31

In its Statement, the Government has a section captioned "The structure of the industry," in which it sets forth market share statistics, alleges that a pattern of concentration prevails, and refers to competitive difficulties allegedly experienced by nonintegrated fabricators (Govt. Br., pp. 18-24). We dispute both that there is an "industry" and that numerical data as to market shares and concentration can adequately describe the "structure" of a market; however, to avoid undue repetition, we shall defer discussion of

²¹ In dollar terms, 1958 sales of copper weatherproof and service drop amounted to more than \$15 million (R. 319-22).

the Government's concentration contentions until the Argument portion of this Brief (infra, pp. 53-70).

As to the alleged competitive difficulties of independent fabricators, it should be noted that the district court found that this acquisition "will not bring about, enhance or aggravate any so-called 'price squeeze' . . . " (Fdg. 66, R. 1296); that "no shortage in primary aluminum is foreseeable" (Opin., R. 1312); and that independent manufacturers testified that "in the three years since the acquisition, there had been no adverse effect," and that none foresaw any future adverse effect (Fdg. 50, R. 1294). The abandonment of insulted aluminum products by certain nonintegrated companies, the court attributed to "the existence of a vigorous competition in the products involved" (Opin., R. 1330). In fact, during the post-acquisition period, other nonintegrated companies substantially increased their sales of aluminum conductor products, and expanded, or planned to expand, their capacity for producing such products (R. 75-76, 228, 381, 404-06, 984-85, 990).

3. THE PROCEEDINGS IN DISTRICT COURT

On February 5, 1962, after approximately 22 months of extensive pre-trial discovery, the four-week trial of this action commenced. At the trial, the court received more than 500 documentary exhibits and heard and observed more than 50 witnesses, among them engineers and purchasing agents for public utilities, experienced wire and cable technical, sales and managerial personnel, and appellees' executive officers chiefly responsible for the acquisition and operation of Rome.

On January 28, 1963, the court filed its Opinion and Findings of Fact and Conclusions of Law and dis-

missed the Complaint. With respect to the two alleged lines of commerce involved in this appeal—aluminum conductor and insulated aluminum conductor—the court held (1) that they were not proper lines of commerce, and (2) even assuming that they were proper lines, the prohibited anticompetitive effect had not been shown.

The court's line of commerce determinations were based on the findings as to industry understanding and manufacturing interchangeability, copper-aluminum competitiveness which have been reviewed above (pp. 14-18). In concluding that the Government failed to prove the prohibited effect on competition, the court refused to condemn the acquisition solely on the basis of market share statistics, since such data not only showed Rome's shares to be comparatively small but demonstrated continuous and substantial declines in Alcoa's pre-acquisition market share and in the Alcoa-Rome combined share after the acquisition (Opin., R. 1324, 1329; Fdg. 45, R. 1292-93). The nonstatistical evidence established, inter alia, that Alcoa's purpose was to overcome the market disadvantage resulting from its lack of insulating capability (Opin., R. 1321, 1333; Fdg. 7, R. 1284); that there had not been substantial or vigorous competition between Alcoa and Rome (Opin. R. 1329; Fdg. 52, R. 1294); that there is complete and demonstrated ease of entry (Opin., R. 1323; Fdgs. 54-58; R. 1294-95); that neither competitors nor purchasers have been, or expect to be, adversely affected in any way by the acquisition (Opin., R. 1326, 1330; Fdgs. 59-66, R. 1295-96); and that there has been and continues to be vigorous competition in the manufacture and sale of aluminum wire and cable products (Opin., R. 1330; Fdg. 69. R. 1297).

SUMMARY OF ARGUMENT

The district court found that the Government failed to sustain its burden of proof on either line of commerce or competitive effect. Accordingly, this appeal must fail if the district court can be sustained as to either necessary element of a Section 7 case.

I

The district court ruled that the Government failed to prove (A) that insulated aluminum wire and cable products comprise a line of commerce separate from their copper counterparts; and (B) that a meaningful line of commerce can be created by adding together noncompetitive bare and insulated aluminum conductor products. These determinations are challenged solely as a matter of law, the court's underlying findings of fact being undisputed.

A. (1) Applying the practical indicia set forth in Brown Shoe Company v. United States, 370 U.S. 294 (1962), the district court found that the industry does not differentiate between copper and aluminum insulated products, that copper and aluminum products are functionally interchangeable, and that there are no unique production facilities, distinct customers or specialized vendors for insulated aluminum conductor products. Though recognizing that the prices of copper and aluminum insulated products are "generally distinet" and not sensitive to each other, the court found that this did not foreclosse "actual competition." Accordingly, making a practical judgment based on the great preponderance of the submarket indicia, it concluded that insulated aluminum conductor had not been established as a proper line of commerce.

- (2) The Government argues that the district court should have based its line of commerce determination solely on aluminum's price advantage in two simple insulated products. This one-sided approach to market definition ignores entirely the district court's undisputed finding that insulating fabricators can and do "switch readily" from copper to aluminum conductor products in accordance with market conditions. The importance of such interchangeability as a determinant of market boundaries is firmly established in economic theory and is reflected in the supply-oriented submarket indicia-unique production facilities, distinct customers and specialized vendorsendorsed by this Court in Brown Shoe. Here, the absence of "distinct customers" and the court's undisputed findings as to industry practice establish that it would have been unrealistic to confine the relevant "area of effective competition" to the relatively small portion of total insulating capacity (less than 5 per cent) that at the time of trial happened to be allocated to aluminum.
- (3) Reinforcing and confirming the court's line of commerce determination, though not essential to it, are its findings that "substantial quantities" of insulated copper products are sold in "active," "lively," and "actual" competition with their aluminum counterparts. Seeking to minimize these findings, the Government argues that such competition will ultimately disappear. The record, however, does not support this contention, and, indeed, the Government did not even request such a finding in its Proposed Findings and Brief submitted to the district court.
- B. The alleged aluminum conductor line of commerce is the mathematical sum of bare and insulated aluminum conductor shipments. If the insulated com-

ponent is not, itself, a proper line, then the composite, too, must fall, since, as to the insulated segment, important competitive elements are excluded. In any event, this grouping of noncompetitive bare and insulated products is not recognized in the industry as a separate economic entity or submarket, and appears to be simply a numerical trick calculated to give this acquisition an appearance of substantiality. Such appearance is deceiving for the composite line consists predominantly of Alcoa's bare aluminum conductor shipments. Rome was de minimis with respect to such products, and no appeal has been taken from the district court's ruling that no anticompetitive effect was shown with respect to bare aluminum conductor.

II

Prior to the acquisition, the only products sold by both Alcoa and Rome to more than a de minimis extent were two simple insulated aluminum conductor products, and as to these, competition between them was found not to be substantial. The district court found that market share and concentration statistics, standing alone, did not condemn the merger, and, relying on numerous economic and historical factors, concluded that the Government had not sustained its burden of proof on the competitive effect issue.

Though not disputing the court's findings of fact, the Government argues that the acquisition violates Section 7 because Alcoa, "the industry leader in an already oligopolistic product market," has acquired a "significant" competitor. This theory has no relation to the facts of this case.

A. (1) With respect to insulated aluminum conductor, Alcoa was far from the "industry leader," rank-

ing third, more than 60 percent behind the first ranking supplier, and lacking insulating capability and product diversity possessed by many of its competitors.

- (2) The Government's glib assumption that insulatel aluminum conductor is an "oligopolistic" market rests entirely on market share and concentration percentages. It is, however, common ground among economists that such simple numerical and statistical measures cannot afford the "firm understanding of the structure of the relevant market" that is required in Section 7 cases. United States v. Philadelphia, Bank, 374 U.S. 321, 362 (1963). Concentration percentages are particularly meaningless where, as here, the alleged "market" is so narrowly drawn. But even where the market may be properly delimited, its structure is not determined by simple statistical measures. Rather, a coordinated examination of important market structure variables, such as condition of entry and product differentiation, and the actual record of market performance over a period of time, is required. Here, such an examination confirms the court's finding that the alleged insulated aluminum conductor "market" is characterized by active and vigorous competition. Thus, the Government's assumption that the acquistion occurred in an already "oligopolistie" market cannot be sustained.
- (3) The Rome acquisition will not affect market structure or impair the vigorous competition in insulated aluminum conductor. There are numerous strong and capable firms which are either already making insulated aluminum conductor products or are "waiting in the wings." Rome, itself, was even less important in the so-called insulated aluminum "market" than its small market share would indicate. It adhered to a

"policy of not going below the prices of its competitors" and had declined significantly in market percentage from 1955 to 1958.

- B. (1) As noted, the alleged aluminum conductor line is simply a mathematical composite of bare and insulated aluminum conductor products. The Government concedes that this acquistion does not have the prohibited effect with respect to bare aluminum conductor products. Since such effect cannot be shown as to the insulated component, it follows that the Government has also failed in its burden of proof as to the composite line.
- (2) The only purpose of the composite aluminum conductor line is to show a market percentage of the magnitude deemed significant by this Court in *Philadelphia Bank*. In this case, however, such percentage has no competitive significance whatever since it primarily reflects Alcoa's pre-acquisition position in bare aluminum conductor. The small portion contributed by Rome, 1.3 per cent, consisted predominantly of insulated aluminum conductor which is not even claimed to be competitive with bare. Moreover, this percentage is actually just a point on a steady, downward curve reflecting the continuing erosion of Alcoa's position as a supplier of bare aluminum wire and cable, a decline that began long before the acquisition and has continued thereafter.
 - C. Where, as here, market share statistics are not conclusive, determination of the competitive effect issue requires "an examination of various economic and historical factors..." Brown Shoe, 370 U.S. at 329. Here, such factors, to a degree unprecedented in Section 7 cases, affirmatively establish that this acquisition will not have the prohibited anticompetitive effect.

Especially important are the following: The unparalleled ease of entry; the absence of product differentiation; the substantial market share declines experienced by Alcoa before, and by Alcoa-Rome after, the acquisition; the fact that Rome was not an aggressive price competitor; the absence of substantial competition between Alcoa and Rome; the fact that competing manufacturers have not been and will not be adversely affected by the acquistion; the post-acquisition expansion of nonintegrated competitors; the uncontradicted testimony of utility purchasers formerly buying from both Rome and Alcoa that this acquisition had not had, and will not have, any adverse effect; the fact that it was Alcoa's objective to acquire insulating capability and diversification rather than to expand its aluminum conductor facilities; the absence of a history of mergers on the part of Alcoa or a significant merger trend in the alleged industry as a whole; and the continued vigor of competition.

ARGUMENT

This appeal challenges the district court's application of amended Section 7 to two alleged aluminum conductor lines of commerce. Since the court found that the Government had failed to sustain its burden of proof on both the line of commerce and competitive effect issues, the appeal must fail if the district court can be upheld as to either issue. In Part I, we will show that the district court's line of commerce determinations comport fully with standards established by this Court in Brown Shoe Co. v. United States, 370 U.S. 294 (1962), and other cases. In Part II, we will show that the district court correctly applied Section 7 in finding that the Government had not proved the required anticompetitive effect.

THE DISTRICT COURT CORRECTLY REJECTED INSULATED ALUMINUM CONDUCTOR AND ALUMINUM CONDUCTOR AS "LINES OF COMMERCE"

In district court, both parties agreed that conductor wire and cable, corresponding to the wire and cable industry, and insulated wire and cable (copper and aluminum), corresponding to the insulating subindustry, were proper lines of commerce (Fdgs. 31, 33, R. 1289-90). Appellees opposed, and the court rejected, the Government's attempts to further divide the insulating subindustry into an insulated aluminum subsubmarket, and to establish a composite aluminum conductor line consisting of bare and insulated aluminum products (Fdgs. 23, 25-29, R. 1288-89; Opin. R. 1316-17). We shall take up first the Government's alleged insulated aluminum conductor line since the court's findings with respect thereto are pertinent to the composite aluminum conductor line.

A. The District Court Properly Rejected Insulted Aluminum Conductor as a Line of Commerce

The district court has found that insulated products made from aluminum do not comprise a product market, or submarket, separate and distinct from their copper counterparts. The Government does not challenge the court's underlying findings of fact, but claims that it erred in failing to give controlling weight to the price differential between copper and aluminum insulated products (Govt. Br., pp. 39, 46). The Gov-

²² Industry No. 3357 of the Standard Industrial Classification is entitled "drawing and insulating of nonferrous wire" and includes establishments which manufacture either bare or insulated products, using either copper or aluminum as the conductor metal (AR 74, R, 3451, 3460).

ernment's single-factor approach to market definition is inconsistent with this Court's Brown Shoe decision; in this industrial context, excludes critical elements from the relevant "area of effective competition"; and disregards the court's findings that the copper-aluminum price difference does not foreclose "lively," "active," and "actual" competition between copper and aluminum insulated products (Opin., R. 1312, 1316).

(1) The District Court Properly Applied the Pragmatic Test Established in Brown Shoe

In Brown Shoe, this Court held that there are broad product markets within which there may be "well-defined" and "economically significant" submarkets. 370 U.S. at 325. It did not attempt to formulate any rigid standard for determining submarket boundaries, but indicated that a broad-ranging, pragmatic evaluation of market realities was required. Courts were admonished to examine (ibid.)

such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.

The district court, relying on industry testimony and supporting documentation, concluded that the Government had not sustained its burden of proof since the alleged insulated aluminum line does not satisfy the great preponderance of the listed indicia. Insulated aluminum "is not recognized in the industry as a separate economic entity" (Opin., R. 1316; Fdgs. 25, 26, R. 1288); insulated wire and cable products are designated to the control of the contr

nated by their function or type, e.g., weatherproof, multiplex, building wire, control cable, etc., whether made from copper or aluminum, and product classifications used by the Bureau of the Census conform to this practice28 (Fdg. 25, R. 1288; R. 946); copper and aluminum insulated products "are completely interchangeable from a performance standpoint" (Fdg. 28, R. 1289; Opin., R. 1316); both are made interchangeably on the same equipment and with the same personnel (Fdg. 27, R. 1288; Fdg. 56, R. 1295); the same customers, i.e., utility companies, purchase copper and aluminum insulated products (Opin., R. 1316; Fdg. 28, R. 1289); and there are no "specialized vendors" of insulated aluminum wire and cable (Opin., R. 1316; Fdg. 26, R. 1288). Though recognizing that copper and aluminum wire and cable prices are "generally distinct" and not sensitive to each other, the court found that this did not foreclose "actual competition" between aluminum products and their copper counterparts (Opin., R. 1316).

Thus, the court's conclusion that insulated aluminum conductor is not a self-contained "area of effective competition" rests on a pragmatic examination of market realities. The Government's contention that it should have disregarded all but the two indicia that seemed to favor its position is, we submit, wholly at variance with the balanced appraisal called for by Brown Shoe. Moreover, because of the nature of competition in the insulating business, the indicia prin-

While not necessarily controlling on the line of commerce question, the census classifications are not without significance. See Crown Zellerbach Corp. v. Federal Trade Commission, 296 F. 2d 800, 813 (9th Cir. 1961), cert. denied 370 U.S. 937 (1962).

cipally relied on by the district court have special and compelling importance in this case.

(2) The Government's Single-Factor Test Is Inconsistent (with Brown Shoe and Would Exclude Critical Elements from the Relevant "Area of Effective Competition"

As noted, the Government urges that the court should have determined the line of commerce issue solely on the basis of the copper-aluminum price difference. Though conceding that copper and aluminum insulated products are competitive, it claims that they are "sufficiently noncompetitive to be treated as distinct submarkets" (Govt. Br., p. 40). The implicit assumption in this argument is that the only valid criteria for determining the "area of effective competition" in Section 7 cases are the "distinct prices" and "sensitivity to price changes" indicia. This approach to market definition is not only incompatible with Brown Shoe but, in this case, would lead to an artificial and unrealistic line of commerce.

(a) Submarket Boundaries Are Determined by the Existence of Substitution at Either the Product or Production Levels

Where the issue is whether products of different industries, made in wholly different manufacturing establishments, must be joined in a single product market, the distinct prices and price sensitivity indicia will be largely determinative. On the other hand, where, as in both *Brown Shoe* and this case, the issue is whether products of the same industry, made in the same plants and on the same equipment, should be broken down into separate product markets, other criteria—e.g., industry recognition, unique production facilities, distinct customers, specialized vendors—be-

come of critical importance.²⁴ This is recognized by economists as well as by this Court's *Brown Shoe* opinion.

Economists specializing in problems of competition and monopoly emphasize that a market must be defined in light of either product or supply substitution. Professor Stigler, in the introduction to a series of essays concerning business concentration, formulates this as follows:

An industry should embrace the maximum geographical area and the maximum variety of productive activities in which there is strong long-run substitution. If buyers can shift on a large scale from product or area B to A, then the two should be combined. If producers can shift on a large scale from B to A, again they should be combined.

Economists usually state this in an alternative form: All products or enterprises with large longrun cross-elasticities of either supply or demand should be combined into a single industry.²⁵

Professor Kaysen makes the same point:

To delimit the market in terms of products requires examination of both the chain of potential substitutes at various prices as seen by buyers and the widening circle of potential rival suppliers at various prices as seen by sellers.²⁶

The Government, itself, stressed the importance of interchangeability of productive facilities in *United States* v. *Brown Shoe Company*, 179 F. Supp. 721, 729 (E.D. Mo. 1959), where it urged the court to adopt lines of commerce including different types and grades of shoes on the ground that "the same machinery is used to produce shoes of different types and grades and . . . production is often converted between types and grades."

²⁵ Business Concentration and Price Policy 4 (1955).

²⁶ Business Concentration and Price Policy 117.

The Government's line of commerce argument is, of course, diametrically opposed to the economists' concept of a product market.

In Brown Shoe, as in duPont-General Motors, this Court made clear that a line of commerce is not just one or two reasonably homogeneous products. Rather, it is a "relevant market" or "area of effective competition," with reference to which "substantiality" can rationally be determined." With specific reference to a submarket, this Court has emphasized that in order to qualify as a line of commerce, it must be "well-defined" and "economically significant," and should be recognized as a "separate economic entity," not simply as a separate product.

Moreover, the "practical indicia" to be considered in determining submarket boundaries, though referring to short-run rather than long-run substitutability, express in practical terms the basic economic concept that markets are to be defined in terms of close substitution of either product or production facilities. Indeed, these indicia are most meaningfully applied when broken down into demand (product) and supply (production) indicia. This can be illustrated by two examples: (1) If products A and B have no peculiar characteristics and uses and have similar and mutually sensitive prices, there will be substantial and rapid product substitution, and both must be placed in

²⁷ United States v. E.I. duPont de Nemours & Co., 353 U.S. 586, 593 (1957); Brown Shoe Co. v. United States, 370 U.S. 294, 324 (1962).

²⁸ The distinction between broad markets and submarkets having antitrust significance might well be expressed in terms of the difference between long-run and short-run substitutability.

²⁹ Compare Stigler, op. cit., at 4-5.

the same submarket. (2) Where no manufacturing specialization or unique production facilities are required, and the same vendors sell products A and B to the same customers, there will be substantial and rapid supply (or production) substitution, and, again, A and B must be placed in the same market.

The rationale for such a bilateral approach to market definition is that where either type of substitution exists, market power cannot be measured by reference to A alone, for suppliers of A face effective competition from product B, itself, in example (1), and from production facilities used on B, but readily applicable to A, in example (2). In either case, the existence of effective substitution prevents the achievement or exercise of market power.³⁰

The "distinct customers" indicium is important to this argument, for the technical ability to shift productive facilities from one product to another may be rendered competitively meaningless if "continuing relationships between buyers and sellers ... make such shifts unlikely." United States v. Bethlehem Steel Corp., 168 F. Supp. 576, 592 (S.D.N.Y. 1958). Here,

so The term "area of effective competition" which this Court uses synonymously with "relevant market" or "line of commerce" derived from Transamerica Corp. v. The Board of Governors, 206 F./2d 163, 169 (3d Cir. 1953), where Judge Maris stated that "the area or areas of effective competition in which monopoly power might be exercised" must be determined before an acquisition's competitive effect can be ascertained. Quoted in United States v. E. I. duPont de Nemours & Co., 353 U.S. 586, 593 (1957).

³¹ The close relationship between the "distinct customers" indicium and supply substitution as a determinant of market boundaries is noted in Bock, Mergers and Markets. An Economic Analysis of Case Law 30 (1960), which was cited by this Court in Brown Shoe, 370 U.S. at 325, n. 43.

in contrast to Bethlehem Steel, there are no "distinct customers" for copper and aluminum insulated products, and manufacturers "switch readily from one product or conductor metal to another in accordance with market conditions" (Fdg. 56, R. 1295).

We respectfully submit, therefore, that in appropriate cases, productive capacity devoted to products A and B must be combined in a single submarket, whether or not A and B are closely competitive in use. This conclusion, not only comports with economic analysis but gives meaning to the supply-oriented indicia—unique production facilities, distinct customers, specialized vendors—which would be nullified by the Government's one-sided approach.

(b) The District Court's Finding That Insulating Fabricators Move Freely Between Copper and Aluminum Insulated Products is Controlling on the Line of Commerce Issue

As noted, we do not suggest that the mere theoretical possibility that productive capacity may be shifted from one product to another requires that all products that can be made interchargeably must necessarily fall within the same submarket. Here, however, the court has found that it is the regular practice in the industry for wire and cable insulators to shift from one conductor metal to another.

The court's findings depict a single insulating entity consisting of producers who regard themselves simply as insulators, "not as insulators of copper wire and cable on the one hand or of aluminum wire and cable

Here, of course, as will be argued below, there is also substantial competition at the product level (infra, pp. 38-45).

on the other" (Fdg. 26, R. 1288). Such insulating fabricators move freely from one product and one conductor metal to another and, in a continuing, dynamic process, re-evaluate their product lines and consider how their insulating capacity should be allocated among copper and aluminum products³³ (Fdgs. 56, 85, R. 1294-95, 1300). Since there are neither "specialized vendors" nor "distinct customers" for insulated aluminum conductor products, the court found that insulators presently using only copper would also make aluminum products "if profitable orders were obtained" (Fdg. 56, R. 1295).

The Government's oversimplified line of commerce argument wholly ignores the dynamics of competition in the insulating business. Its error is clearly revealed in the following excerpts from its Brief (Govt. Br., p. 43):

Utilizing a high-cost metal, fabricators of insulated copper cable are powerless to eliminate the price disadvantage under which they labor and thus can do little to make their product competitive (R. 224).

[T]he availability of a copper substitute exerts little, if any, restraint upon the power of aluminum cable manufacturers to raise the price of their product (Govt. Br., p. 44).

First of all, it is fallacious to refer to "fabricators of insulated copper cable" and "aluminum cable

^{**}This process is especially significant in this case since products where aluminum is principally used are among the simplest of all insulated products, and the shift to such products, in either copper or aluminum, can readily be made by the numerous manufacturers already making more sophisticated products (Fdgs. 55, **E4. R. 1294, 1299).

manufacturers" as if these were two separate and static entities (Fdgs. 26, 56, R. 1288, 1295). Indeed, the very witness relied on by the Government testified that his company makes insulated products, using either copper or aluminum; that the amount made with each metal depends on "what the customer wants"; and that both copper and aluminum products are made interchangeably on the same equipment (R. 223, 228-29). And, as another Government witness testified, he began to make aluminum conductor products "as soon as the first customer asked us, about 1950" (R. 73; see also e.g., R. 946, 982).

Thus, it is obvious that if a fabricator should feel himself at a competitive disadvantage owing to the use of copper, he is not "powerless," for he can readily use aluminum. Since he will still be making the same product on the same machinery and with the same personnel, and will still be selling to the same utility customers for the same end use, it would have been unrealistic for the district court to hold that merely by changing raw material, a fabricator shifts from one line of commerce to another.

The competitive importance of the dynamic factors that the Government ignores is strikingly illustrated by recent events. In the early 1950's, as the Government acknowledges, an increase in copper prices made aluminum conductor products more popular (Govt.

³⁴ With the exception of the three primary aluminum producers, all but one of the 29 companies listed by the Business and Defense Services Administration (BDSA) as manufacturers of aluminum insulated products (AR 5, R. 3211) were also listed by that agency in 1958 as producers of insulated copper wire and cable (AR 71, R. 3425). Significantly, each of the three primary aluminum producers, Alcoa, Kaiser and Reynolds, is now also bi-metallic since the insulating companies they acquired are listed as manufacturers of insulated copper wire and cable (ibid.):

Br., pp. 24-25). Only four companies were then making insulated aluminum products. The increased demand for aluminum however, generated "a sudden surge of new entries" (Govt. Br., p. 54), virtually all of which came from existing insulating companies which previously had used only copper (Opin., R. 1323). Thus, (1) the so-called copper fabricators were not "powerless" to compete, and (2) the availability of insulating capacity, theretofore, used solely on copper, exerted profound restraint upon the "aluminum cable manufacturers" power to achieve any sort of market advantage.

More recently, insulated aluminum prices have declined (R. 1228-29; see also R. 243, 399), and insulators have had little economic incentive to move in that direction. The court's findings make clear, however, that if aluminum cable prices were to rise above a competitive level, insulating capacity presently used on copper would be allocated to aluminum. Among the companies to do so would be such substantial insulating firms as Anaconda, General Cable, Essex, Southwire, General Electric, Circle, etc., which already are devoting a relatively small portion of their total capacity to aluminum. Other companies, e.g., Phelps

as The record is clear that this did not involve "entry" in the normal sense of that word. Rather, manufacturers already in existence simply used some of their existing machinery and personnel to make aluminum as well as copper conductor products (e.g., R. 73, 242, 250-51, 280, 735-36, 942-43, 985-86).

³⁷ Precise figures as to the comparative importance of aluminum and copper for each of the companies presently using both are not available. However, the court's findings as to the limited role of aluminum in the insulating business overall (Fdg. 29, R. 1289) and evidence relating to Rome (AR 52, R. 3405), Essex (R. 231-34) and General Cable (R. 996-97), clearly indicate that aluminum presently occupies only a small portion of an insulator's total capacity.

Dodge, Kennecott, Simplex, Triangle, would do likewise, for, as the court found, manufacturers not presently making insulated aluminum conductor products consider whether to do so, and would make such products if it could be done profitably (Fdg. 56, R. 1294-95; see, e.g., R. 250-51, 280). It is no answer that not all of the more than 200 insulating companies presently make the simple products chiefly used in overhead distribution lines, 38 for companies able to make more complicated products can readily make the simpler ones, such as line wire and multiplex cable (Fdg. 55, R. 1294; Fdgs. 84, 85, R. 1299-1300).

For all of the reasons just discussed, "substantiality" cannot be determined in terms of a "market" restricted to the manufacture and sale of insulated aluminum products. This conclusion, which we believe is compelled by the court's findings as to industry recognition and production substitution, is reinforced by the competition found to exist between copper and aluminum insulated products.

(3) There Is Substantial Competition Between Copper and Aluminum Insulated Products

The Government does not dispute the district court's findings that the copper and aluminum versions of insulated products are "completely interchangeable from a performance standpoint" (Fdg. 28, R. 1289; Govt. Br., p. 41), and that they are sold in "actual competi-

³⁸ While the Government claims that only 21 companies produced "the aluminum or copper insulated conductors principally used in overhead lines" (Govt. Br., p. 21), the Wire Buyers' Guide, official publication of the Wire Association lists approximately 45 manufacturers of weatherproof line wire (AR 73, R. 3439). In accordance with the usual industry practice, it does not differentiate between copper and aluminum.

tion" with each other (Opin., R. 1316). It contends, however, that because of the "substantial" and "stable" price differences, copper-aluminum competition in overhead distribution products is not effective and, in any event, is "rapidly vanishing" (Govt. Br., pp. 43, 45). These contentions are contrary to the findings and the evidence.

(a) Copper and Aluminum Are Substantially Competitive In The Overhead Distribution Field

In Brown Shoe, where, as here, the lines of commerce found by the court satisfied a preponderance of the submarket indicia, this Court ruled that price differences between medium and low-priced shoes were not decisive, pointing out that "it would be unrealistic to accept Brown's contention that, for example, men's shoes selling below \$8.99 are in a different product market from those selling above \$9.00" 370 U.S. at The Government seeks to distinguish this case on the ground that the price differential between copper and aluminum insulated products is so great as to foreclose the possibility of only a 1¢ difference as in Brown Shoe (Govt. Br., p. 46). In fact, however, competition between copper and aluminum insulated products in overhead distribution is, if anything, closer than between low and medium-priced shoes.

In terms of the current price of the wire or cable, itself, aluminum weatherproof line wire and multiplex cable are cheaper than their copper counterparts. This advantage, however, is not necessarily determinative, for when all economic factors are taken into account, the net advantage of aluminum in terms of final installed cost is reduced, and may disappear (Fdg. 28, R. 1289; supra, p. 15). Thus, for example, Consoli-

dated Edison has determined that copper was more economical than aluminum in its overhead primary and secondary distribution mains in New York City, reversing a previous decision in favor of aluminum (AR 76, R. 3472; R. 712). One of the reasons copper prevailed was that Consolidated Edison, being interested in relatively short extensions to an existing system, required frequent connections. Admittedly, this may not be "exactly typical of national conditions," but, in varying degree, other utilities serving congested areas encounter comparable conditions (R. 713).

Other utilities, too, scrutinize carefully the over-all economics of copper versus aluminum in overhead distribution products. Alternate quotations are requested for copper and aluminum versions of such products (Gx 270, R. 2383; Gx 271, R. 2385; Gx 272, R. 2387; R. 774), and the purchaser may choose copper even though the aluminum cable, itself, is cheaper (R. 768; AR 41. R. 3396; R. 890-91). Moreover, as a Government witness testified, even companies presently using aluminum in their overhead lines appraise the pros and cons of copper and aluminum whenever substantial purchases are made, taking into account, in addition to the cost of the cable, "the labor, the installation which may vary depending upon the areas" where the conductor is to be installed, cost differentials in other components, such as connections, and other considerations based on the "characteristics of the two metals." "Sometimes [these factors] are favorable to copper

³⁹ A 1959 study determined that copper was also more economical than aluminum in service drops from the utility pole to buildings. This determination was reversed the following year because of technological developments that gave aluminum a net advantage (R. 712).

under certain applications and sometimes they are favorable to aluminum" (R. 214-15). The court found that this type of evaluation was required in the purchase of insulated overhead distribution products (Fdg. 28, R. 1289).

Furthermore, electric utilities do not use only weatherproof line wire and multiplex cable in their overhead distribution lines, but may also purchase other, more complicated products. When this occurs, copper will frequently be cheaper, since "the more sophisticated the conductor is away from the bare conductor, the less the differential is between copper and aluminum" (R. 216; supra, p. 15). The record shows that utilities have requested alternative quotations from Rome on more complicated overhead distribution products. In many instances, the copper alternate was cheaper; in others, aluminum prevailed. While the more sophisticated constructions are not as widely used in overhead distribution systems as the simpler products, they are not insignificant.

That copper conductor products are a significant' factor in the overhead distribution field, notwithstanding aluminum's apparent price advantage in the simpler products, is indicated by the court's finding that even as to such products "substantial quantities are sold with copper as the conductor" (Fdg. 29, R. 1289).

⁴⁰ R. 760-66, 773-74; AR 34, R. 3361; AR 35, R. 3365; AR 36, R. 3373; AR 37, R. 3375; AR 38, R. 3381; AR 39, R. 3388; AR 40, R. 3394.

⁴¹ Figures as to total usage of pre-assembled aerial cable and other more sophisticated constructions in overhead distribution are not available. Rome's sales of these products in 1958-1960 for use in low-voltage (secondary) and high-voltage (primary) distribution systems (R. 1280-1282) amounted to nearly \$1 million.

This finding, not challenged by the Government, is fully supported by the record. The Government's own survey shows that on a footage basis, copper represented 22.8 per cent of gross additions to insulated overhead distribution lines in 1959 (Gx 468, R. 2740). In dollar terms, this would amount to well over \$15 million. Moreover, data available for several manufacturers show that their copper weatherproof and service drop cable sales in 1958 equalled or even exceeded in value their sales of the aluminum counterparts (AR 65, 66, 67, R. 3416-18). With respect to weatherproof alone, copper exceeded aluminum by as much as two or three to one (ibid.).

The substantial sales of copper in overhead distribution products, the purchasers' practice of comparing copper and aluminum on the basis of overall economics, and the close price relationship in the case of more. sophisticated constructions, all sustain the court's finding that copper-aluminum competition is "lively" and "active," and refute the Government's contention that close competition, such as may exist between medium and low-priced shoes, cannot occur with respect to copper and aluminum insulated products. The existence of such competition, though not necessary to sustain the court's line of commerce determination in light of the industry's practice and usage, and the absence of unique production facilities, distinct customers, and specialized vendors, nevertheless, reinforces the conclusion that it would be unrealistic to hold that

⁴² The 1958 Census of Manufactures shows a total dollar value of \$66 million for weatherproof and service drop cable (copper and aluminum combined) (AR 67, R. 3418). 22.8 per cent of this would be \$15 million, but this understates the dollar value of the copper versions of these products by a "fairly large" amount since they tend to be more expensive than their aluminum counterparts (R. 320).

the manufacture and sale of insulated aluminum conductor is a separate "area of effective competition."

(b) It Has Not Been Shown That Copper-Aluminum Competition in the Insulated Field will Disappear

Recognizing that the above findings imperil its line of commerce position, the Government argues that copper-aluminum competition is rapidly disappearing, and that it is only a matter of time until copper is displaced in the insulated field to the same extent as in bare transmission. Had such displacement progressed further, it argues, the court would presumably have recognized insulated aluminum conductor as a separate submarket, "for it found bare aluminum to be a 'line of commerce' largely on the ground that it had 'practically displaced copper for use in overhead transmission lines'" (Govt. Br., pp. 41-42).

The fallacies in this argument are manifold. First of all, it is simply not true that bare aluminum was found to be a line of commerce "largely" because it had virtually displaced copper in overhead transmission; equally important were the facts that (i) it is "generally recognized as a separate product classification," and (ii) "the manufacture and sale of these products require special stranding equipment and designing skill" (Fdg. 24, R. 1288; supra, p. 15). Thus, not only is there virtually no product competition, but manufacturing processes cannot readily be converted between copper and aluminum, as is true in the insulated field. There can, therefore, be no presumption that further, or even complete, displacement of copper in the field of insulated conductors would have altered the court's line of commerce determination.

In any event, the Government is mistaken in asserting that the record establishes "an unmistakable trend away from insulated copper in the overhead distribution field" which "would have continued until aluminum had superseded copper to the same degree (94.4 per cent) as it previously had in overhead transmission" (Govt. Br., p. 42). Not only did the court make no such finding, but the Government, in its Proposed Findings and Brief, did not even ask the court so to find. The Government's failure to seek such a finding is easily explained by the record.

First. Sales figures for Alcoa-Rome and other companies whose figures were available to the court do not demonstrate the "unmistakable," continuing trend now urged by the Government. In fact, the figures as to the dollar value of Rome's weatherproof sales show that throughout the 1956-1960 period, copper actually exceeded aluminum by a margin of at least 3 to 1. In percentage of total dollar value, copper ranged from 76.7 per cent in 1956 to 87.5 per cent in 1960 (AR 54, R. 3405).43 General Cable's sales figures for the years 1958 and 1959 show copper weatherproof more than three times as great in value as aluminum weatherproof, and by a greater margin in 1959 than 1958 (AR 65, R. 3416). Its President, testifying in February 1962, stated that General Cable expected to maintain the same balance between copper and aluminum in the future as in the past (R. 996).

Second. It is wholly specious to argue that "the only real differences between the two processes of displacement is that the substitution of bare aluminum for bare copper in overhead transmission started much earlier" (Govt. Br., p. 42). As noted, in the overhead transmission field, aluminum has important technical advantages over copper whereas in the insulated field,

⁴⁸ In 1961, this percentage dropped to 77.5 per cent, which still exceeded the 1956 percentage (R. 933).

copper and aluminum are "completely interchangeable from a performance standpoint" and aluminum's cheaper cost as a conductor metal may be offset by any of a number of factors (supra, p. 15). These undisputed facts clearly differentiate the two situations.

Third. In arguing that copper is completely disappearing from the overhead conductor field, the Govevament here seeks to show by argument and inference more than its own report on utility buying practices even purported to establish. In conducting this survey, the Government asked each utility to state whether it "expect[ed] any increase or decrease in 1960 and in subsequent years in the proportion of aluminum to copper used in any classification of . . . " overhead lines (Gx 468, R. 2737, 2774). Varying responses, wholly insufficient to establish any future trend, were received (Gx 468 A, R. 2775-3203). Accordingly, the Government's expert, both in his written report and in testimony, refused to make any projection of the trend beyond 1959, candidly stating that responses as to future use of aluminum were "not susceptible to tabulation and [were] not tabulated in [the] report" (R. 307).

For all of the foregoing reasons, it would be completely speculative to say that competition between copper and aluminum insulated products would ultimately vanish. Certainly, the district court's failure so to find cannot be error, where the Government, itself, did not ask it to find that the 1950-1959 trend would continue, let alone that copper-aluminum competition in the insulated field would disappear. In any event, as argued earlier, even if there were far less product competition than has been shown to exist, the court's unchallenged findings, based on the great preponderance of the *Brown Shoe* indicia, would sustain its ultimate line of commerce determination.

B. The District Court Properly Rejected Aluminum Conductor as a Line of Commerce

The alleged aluminum conductor line is nothing but a mathematical composite of (1) bare ACSR and aluminum cable and (2) insulated aluminum wire and cable (see e.g., Gx 434, R. 2714). If, as argued above, insulated aluminum conductor is not a proper line, this alone abould foreclose considering the composite "line" as a separate "area of effective competition," for, as to the insulated segment, important competitive elements are excluded (Add'l. Fdg. 4, R. 1336-37). The analogy to the steel industry advanced by the Government (Br., p. 47, n. 27) is wholly inapplicable, since the court expressly found that the combination of bare and insulated conductor is not "generally recognized in the industry as a separate economic entity or submarket" (Add'l. Fdg. 4, R. 1336-37)."

Moreover, even if insulated aluminum conductor were a proper line of commerce, there is no basis in logic or in the competitive realities of the market place for consolidating bare and insulated products. The bare and insulated components have nothing in common, except that aluminum is used as conductor and both are used by utilities for "the same broad purpose of conducting electricity" (Govt. Br., p. 47). They are not even claimed to be competitive with each other (no utility will pay for insulated conductor where bare will suffice; compare R. 1227 and 1228), different equipment and engineering skills are required for their manufacture and sale (Fdg. 24, R. 1288), and, as noted,

⁴⁴ The Government is incorrect in stating that the district court concluded that aluminum conductor is not a line of commerce "solely on the ground that insulated aluminum conductor, one of its two component submarkets, was not" (Govt. Br., p. 47).

the combination is not recognized as a separate economic entity. In these circumstances, this alleged line of commerce is without competitive significance, and cannot qualify as a "well-defined," "economically significant" product market. Brown Shoe, 370 U.S. at 325.

The indisputable effect, if not the purpose, of this synthetic composite line is to obscure the fact that Alcoa and Rome had essentially different interests and strengths in the wire and cable business. In bare aluminum, where Alcoa, though rapidly declining, was still the leader, Rome was de minimis; while, in insulated aluminum, where Rome was more than de minimis, Alcoa, handicapped by a lack of insulating competence and product diversity, ranked third, far behind two of its competitors (Gx 435, R. 2715; Gx 436, R. 2717). These differences, which the Government seeks to conceal by lumping together noncompetitive bare and insulated products, are revealed by the following table: 45

1958 (Thousands of Pounds)

	Alec		a	Rome	
	Total -	Shipments	% of Total	Shipments	% of Total
ACSR and Aluminum Cable, Bare	175,157	56,990	32.5	537	£.0.
Aluminum Wire and Cable, Insu- lated or Covered	51,346	5,970	11.6	2,411	4.7
Aluminum Conductor Wire and Cable	226,503	62,960	27.8	2,948	1.3

⁴⁸ Based on Fdg. 45, R. 1292; Gx 434, R. 2713; Gx 435, R. 2715; Gx 436, R. 2717.

As the above table makes plain, Alcoa's 27.8 per cent derived predominantly (more than 90 per cent) from bare aluminum cable, while Rome achieved its still very minor 1.3 per cent largely by virtue of its insulated aluminum conductor shipments. In essence, therefore, the alleged aluminum conductor line of commerce serves to inflate Alcoa's market share by capitalizing on its position in bare aluminum cable, even though the Government no longer claims any prohibited effect in the bare aluminum conductor line of commerce, itself (Govt. Br., p. 38). The mere fact that the combination of bare and insulated aluminum conductor produces percentage figures resembling those discussed in the Philadelphia Bank case (Govt. Br., p. 58) is hardly sufficient to convert the composite line into a meaningful area of effective competition."

11.

THE GOVERNMENT HAS FAILED TO SHOW THE REQUIRED ANTICOMPETITIVE EFFECT IN EITHER OF THE ALLEGED ALUMINUM CONDUCTOR LINES OF COMMERCE

The essential differences between Alcoa and Rome in the wire and cable field have already been described (supra, pp. 11-14). Rome was primarily a manufacturer of insulated copper products, Alcoa was chiefly a producer of bare aluminum cable, and, prior to the acquisition, the only perceptible competitive overlap was in the sale of two simple insulated aluminum conductor products. As to these products, Alcoa ranked third in 1958, with 11.6 per cent of total shipments, and Rome was eighth or ninth, with 4.7 per cent of total shipments (Gx 436, R. 2717). In these circumstances, having examined statistics as to market shares and concentration, evidence as to the historical and commercial background of the acquisition, and, the testi-

mony of approximately 30 industry witnesses, both competitors and consumers, the court concluded that the Government had not sustained its burden of proof on the competitive effect issue, even assuming that each of the alleged aluminum conductor lines had been established (Concl. 8, R. 1303).

Market share and concentration statistics, standing alone, the court found, did not condemn the merger, particularly when viewed in light of Rome's "comparatively small percentages" (Opin., R. 1328), the significant increase in the number of suppliers (Opin., R. 1322), the substantial and continuing market share declines suffered by Alcoa prior to the acquisition and, thereafter, by the Alcoa-Rome combination (Opin., R. 1324), and the unparalleled ease of entry which it found to be "closely related to the question of trends of or concentration in the alumitum conductor lines of commerce..." (Opin., R. 1323). Nonstatistical evidence, to a degree unusual, if not unprecedented, in a Section 7 case, affirmatively established the absence of probable anticompetitive effect:

(1) Non-integrated fabricators of aluminum conductor products, most of them called as Government

46 These declines are summarized in the following table (based on Fdg. 45, R. 1292-93): 1954 -Alcoa Bome Rome . Aleoa Rome Alcoa ACSR and Aluminum 0.3 26.1 48.4 0.2 32.5 Cable, Bare & Aluminum Wire and Cable, Insulated or 7.3 5.7 6.9 11.6 4.7 10.0 Covered Aluminum Conductor 1.1 27.8 1.3 42.8 Wire and Cable

witnesses, increased their sales of such products after the acquisition, expanded their facilities for the manufacture thereof, and testified that this acquisition had not adversely affected their businesses (Opin., R. 1330; R. 75-78, 228-31, 380-81, 404, 984-85, 990). No such manufacturer foresaw any future adverse effect from this acquisition (Fdg. 50, R. 1294; Fdg. 62, R. 1295).

- (2) Utility purchasing agents, representing 8 of the 10 significant common customers, testified, without exception, that their position as purchasers of aluminum conductor products had not been, and will not be, adversely affected (Fdg. 59, R. 1295).
- (3) The increase from 4 to 29 in the number of producers of insulated aluminum products in a ten year period established "that entry into the aluminum conductor field is dictated by the status of the competition rather than being controlled by actual economic barriers" (Opin., R. 1323; Fdgs. 54-57, R. 1294-95).
- (4) There was not substantial or vigorous competition between Alcoa and Rome; for example, business records systematically maintained by Alcoa for two years prior to the acquisition established that only 5/100 of 1 per cent of aluminum conductor business lost to all competitors was lost to Rome (AR 58, R. 3409; Fdg. 52, R. 1294; Opin., R. 1329).
- (5) The uncontradicted testimony of utility purchasing agents, and other witnesses, established that Rome was not an aggressive price competitor (Fdgs. 53, 61, R. 1294-95).
- (6) Alcoa's purpose was to secure insulating capability and diversify its operations; it was not moti-

vated by Rome's manufacture of aluminum conductor products (Fdg. 7, R. 1284).,

(7) There is vigorous competition in the manufacture and sale of aluminum wire and cable products, which has not diminished since the acquisition (Fdgs. 62, 69, R. 1295, 1297).

The Government does not challenge these findings, and admits that Rome's market shares "may not appear great in absolute terms" (Govt. Br., p. 62). Nevertheless, it argues, Section 7 is violated because Alcoa, "the industry leader in an already oligopolistic product market," has acquired a "significant" competitor (Govt. Br., p. 37; and pp. 2, 49). Whatever might be the validity of this test as a proposition of law, it has no application to the facts of this case. In products where Alcoa was the "leader," Rome was not "significant"; and the glib assumption that this case involves "an already oligopolistic product market" is wholly without support in the record and contrary to the court's express finding that there is vigorous competition.

In formulating the Questions Presented, and throughout its argument on the merits, the Government floats and slides from bare aluminum conductor, to insulated aluminum conductor, to a composite of the two, and for good measure intersperses irrelevant observations concerning the primary aluminum industry. In order more clearly to show the true facts and circumstances of this case, we shall discuss separately each of the alleged aluminum conductor lines.

- A. Anticompetitive Effect Has Not Been Shown With Respect to Insulated Aluminum Conductor
- (1) Alcoa Was Not And Is Not The "Largest Producer" of Insulated Aluminum Conductor

Although frequently throughout its Brief, the Government refers to Alcoa as "the largest producer," the "industry leader," or "a dominant firm" (e.g., Govt. Br., pp. 2, 37, 49), these epithets do not fairly describe Alcoa's position with regard to insulated aluminum conductor. In this field at the time of the acquisition, Alcoa, with 11.6 per cent of 1958 shipments, ranked a poor third, more than 60 per cent behind Kaiser, with 26.8 per cent, and more than 30 per cent behind Anaconda, with 16.9 per cent (Gx 436, R. 2717). Moreover, it lacked insulating capability and product diversity possessed by many of its competitors. For these reasons, the court's finding that Alcoa did not occupy a dominant position is clearly pertinent to insulated aluminum conductor field (Opin., R. 1326-27).

The Government makes no claim that the simplified test enunciated by this Court in *United States* v. *Philadelphia Bank*, 374 U.S. 321, 363 (1963), is applicable to insulated aluminum conductor (see Govt. Br., p. 58). Rather, its argument as to this line appears to focus upon the allegedly "concentrated" and "oligopolistic" character of the "market" and Rome's "significance" as a competitor. The findings and the evidence, however, make clear (1) that there is vigorous

⁴⁷ This Court there created a rebuttable presumption of illegality applicable to "a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market . . ." 374 U.S. at 363. The Government attempts to invoke this test only with respect to its alleged composite aluminum conductor line (Govt. Br., p. 58).

and effective competition in the sale of insulated aluminum conductors, and (2) that Rome's significance as a competitive force was even less than its admittedly small market share would indicate (see Govt. Br., 'p. 62).

(2) Insulated Aluminum Conductor Is Not "Highly Concentrated" or "Oligopolistic"

The Government claims that a "pattern of concentration prevails" in insulated aluminum conductor because in 1958 five integrated producers accounted for 65.4 per cent of total shipments, and because in 1959, 11 companies had market shares of 1 per cent or more (Govt. Br., pp. 20, 52). Solely on the basis of these figures, it describes the alleged insulated aluminum "market" as "highly oligopolistic" and "highly concentrated" (Govt. Br., pp. 37, 52, 62). The Government's basic misconception is to assume that concentration percentages, which may be significant when speaking of an industry, such as banking, where barriers to entry are high, can be applied mechanically to a few wire and cable products using aluminum instead of copper as conductor.

Such an oversimplified, numerical approach ignores this Court's admonition in *Philadelphia Bank* that the competitive effect question is not "susceptible of a ready and precise answer in most cases," since it requires a prediction of future competitive conditions which must be "based upon a firm understanding of the structure of the relevant market. Yet, the relevant economic data are both complex and elusive" 374 U.S. at 362. And, as exemplified by the analysis of market structure undertaken by Commissioner Elman in *Procter & Gamble*, FTC Dkt. 6901, 3 CCH Trade Reg.

Rep. 116,673, p. 21,568, the plaintiff's burden under Section 7 "is not met, in any case, by invocation of a talismanic per se rule by which to dispense with the need for adducing evidence of probable anti-competitive effect . . . In every case the determination of illegality, if made, must rest upon specific facts." Such a determination cannot be made "solely on the basis of concentration data or other simple statistical materials."

(a) Concentration Percentages Are Not A Reliable Measure of the Structure or Competitiveness of a Market

In part, the Government approach is fallacious because the alleged insulated aluminum conductor line of commerce excludes entirely the enormous insulating capacity presently used on copper, but which can "readily" be allocated to aluminum (Fdgs. 55, 56, R. 1294-95). The irrelevance of concentration percentages in these circumstances is recognized by economists. As stated by Kaysen and Turner:

Where producers can and do produce several products interchangeably, the capacity currently devoted to one of those products understates the amount that should fairly be deemed to be "in" the market. Without a minimally reasonable definition of markets, criteria based on quantitative shares become whimsy."

⁴⁸ Kaysen and Turner, Antitrust Policy 24 (1959).

⁴⁰ Antitrust Policy 134. Professor Chamberlin makes the same point:

Concentration ratios and similar measures are of little significance because they are predominantly the result of how broadly the categories are defined. Chamberlin, "Measuring the Degree of Monopoly and Competition," in Monopoly and Competition and Their Regulation 262. See also Kaysen, Business Concentration and Price Policy 117.

We think "whimsy" fairly describes the Government's reliance on concentration percentages in this case.

Furthermore, even when the relevant market is properly delimited, concentration measures alone do not explain the economic behavior of a market.

It seems vain to expect that numbers and size distribution alone will explain market behavior and therefore equally vain to hope for more from concentration measures than that they should provide a preliminary basis on which resources for further study should be allocated.⁵⁰

And, as the Senate Subcommittee on Antitrust and Monopoly has warned:

Bare statistics necessarily omit many qualitative factors which are essential to a complete understanding of the competitive structure of the entire industrial economy or of an individual industry.⁵¹

Thus, seller concentration is only one aspect of what economists term market structure, i.e., "those conditions external to the firm which are relatively per-

their more recent study of antitrust policy, Kaysen and Turner make the same point: "In general, the application to individual markets of any criterion we choose requires a fairly thorough industry study and cannot be done solely on the basis of concentration data or other simple statistical materials" Antitrust Policy, 25. Similarly, Professor John Perry Miller of Yale has stated: "... it appears both on a priori grounds and on the basis of such empirical evidence as we have that the extent of concentration is only one of several important variables to be examined, whether the interest is in economic analysis or public policy" Business Concentration and Price Policy 135.

⁵¹ Concentration in American Industry, 85th Cong., 1st Sess., p. 4 (1957).

manent or which change only slowly, and which affect, if they do not determine, the way the firm operates." Lathough an important variable, concentration "is not the only such variable and it cannot be adequately understood apart from others" Procter & Gamble, supra, p. 21,570. Other factors that must be considered in order to achieve the "firm understanding" of market structure required in Section 7 cases are the condition of entry into the market, and the degree of product differentiation. Moreover, prediction of future market conditions also requires consideration of market performance.

Since we are interested in the future as well as in the past, we look at structure as well as performance, in order to correlate as well as we can the observed performance with the observable features of market structure, and thus be able to predict the probable relation of future to past performance.⁵⁴

Here, an examination of the alleged insulated aluminum line in light of relevant market structure and per-

⁵² Kaysen and Turner, Antitrust Policy 59.

Turner, Antitrust Policy 71-75; Machlup, The Economics of Sellers' Competition (1952); Procter & Gamble, supra, pp. 21,570-21,572. Another market structure variable sometimes cited by economists is strength of buyers, Industrial Organization 8, 138-143; Procter & Gamble, supra, p. 21,570, n. 24. While this factor is often discussed in terms of buyer concentration (oligopsony), the fact that buyers are large and well-informed will affect the vigor of competition, even though oligopsony may not exist. Here, the fact that many utilities buying insulated aluminum products are extremely large organizations with skilled engineering staffs contributes significantly to the vigor of competition (infra, p. 60).

^{*} Kaysen and Turner, Antitrust Policy 75.

formance criteria will show that it is effectively and vigorously competitive, not "concentrated" or "oligopolistic."

(b) There is Unparalleled Ease of Entry

Condition of entry refers to the relative ease or difficulty with which new sellers may enter the market, as determined generally by the advantages which established sellers have over potential entrants. It is deemed a structural variable so important as to be "a coregulator of business conduct and performance" along with actual competition among existing sellers. 55 With easy entry, a situation exists:

in which there is no impediment to the entry of new firms, in which established firms possess no advantages over potential entrant firms, or in which, more precisely, established firms cannot persistently elevate price by any amount above the competitive minimal-cost level without attracting sufficient new entry to bring price back to that level.⁵⁶

Kaysen and Turner foresee the same consequences where condition of entry is easy:

[I]n the long run, the maintenance of market power, whether by a single firm or by a group, implies the existence of significant barriers to entry into the market by new sellers. Without such barriers, the attempt to exercise power would in general attract new sellers...⁵⁷

⁵⁵ Bain, Barriers to New Competition 3 (1956).

⁵⁶ Bain, Barriers to New Competition 11.

entry as such an important structural concept that he formulates a separate economic model and calls it pliepoly (the Greek plio or "more" plus polein or "to sell," hence pliopoly) for the ready appearance of "more sellers" in the market. The Economics of Sellers' Competition 102-109.

Economists are careful to distinguish between the true determinants of entry and transitory factors that may influence the current record of accomplished entry.

The true determinants are the things that determine for established firms the possible price-cost relations which would and would not induce entry; they are not those things determining whether or not actual entry takes place at a particular time.⁵⁸

Generally regarded as among the most critical "true determinants" of entry are (i) absolute cost advantages, (ii) product differentiation, (iii) economies of large scale, (iv) uncertainty, and (v) entry lag. Analysis of these factors is important not only because they determine the condition of entry, but also because they strongly influence "the competitive vigor of the existing firms in the market ..." Procter & Gamble, supra, p. 21,571, n. 27. As will now be shown, not a single one of these entry (and competition) retarding factors operates in the alleged insulated aluminum conductor field.

(i) Existing firms do not have any absolute cost advantage

Existing firms in an industry will enjoy an absolute cost advantage over potential entrants where

the entrant either must use inferior production techniques or must pay higher prices for productive factors such as labor, materials, plant, and money capital.⁵⁹

In the present context, it at least approaches "whimsy" even to discuss "absolute cost advantages" since there

⁵⁸ Bain, Barriers to New Competition 17.

⁵⁰ Bain, Parriers to New Competition 144.

are numerous experienced and capable wire and cable fabricators already using equipment and techniques which can be applied interchangeably to either copper or aluminum products (Fdgs. 55, 56, R. 1294-95). Moreover, products chiefly made from aluminum are among the simplest of all insulated constructions. No patents or secret processes are involved, and surely there is no reason to believe that Kennecott, Phelps Dodge, American Steel and Wire Division of U.S. Steel, and other existing manufacturers must pay more for labor, materials, plant and capital than their fellow insulators who happen, at this moment, to be using both aluminum and copper.

(ii) There is no product differentiation in insulated aluminum conductor

[T]he most important barrier to entry discovered by detailed study is probably product differentiation.**

Product differentiation is based generally on the susceptibility of buyers to persuasive appeals, usually through advertising, concerning the alleged superiority of the products of individual sellers. It flourishes where buyers are relatively uninformed as to the merits of alternative products, and where there is the opportunity for producing significantly different designs and qualities of goods in question. "Such preferences need not, and frequently do not, rest on real or substantial differences in terms of quality or usefulness" Procter & Gamble, supra, p. 21,571. The existence of product differentiation will "make entry for a new firm"

⁶⁰ Bain, Barriers to New Competition 216.

⁶¹ Bain, Industrial Organization 219.

difficult in that it must overcome the established good will of existing sellers."

It is beyond question that no product differentiation exists in the alleged insulated aluminum line of commerce. The few simple insulated wire and cable constructions in which aluminum is used are manufactured according to standardized technical requirements (AR 25-28, R. 3267-3343), and can be produced by virtually any insulating firm (Fdg. 55, R. 1294; Fdg. 84, R. 1299). Appeals to buyers, usually in the form of product bulletins and catalogues, are not made in terms of "differentiating" the products but of conforming them to the accepted standards (AR 30-31, R. 3345-56). The only purchasers of such products—electrical utility companies-are large, well-informed buyers who can and do purchase these products from any producer meeting the industry's standards (e.g., R. 801, 806, 813, 899).63

Kaysen and Turner, Antitrust Policy 74. Product differentiation may also protect the market shares of established firms, making it difficult for other existing firms to expand, and, therefore, as noted, supra, p. 56 is regarded as a prime market structure variable as well as a determinant of condition of entry (infra, pp. 64-65). See also Procter & Gamble, supra, p. 21,571.

is more likely to prevail with respect to consumer goods than industrial commodities, such as wire and cable. "Producer buyers tend in general to make it their business to be well-informed as to the qualities and properties of the goods they buy, and are thus less susceptible to the persuasive appeals of sellers. In addition, their task is frequently simplified by the fact that numerous producer goods are standardized, uniform raw materials, the suppliers of which find little opportunity for introducing physical product differentiation among their outputs" Bain, Industrial Organization 219.

(iii) Economies of large scale do not inhibit entry

Economies of the large plant or firm refer to a decline in unit costs as the scale of the plant or firm is increased. Where significant scale economies are present, an entrant must add a significant fraction to industry output in order to operate at the minimum optimal scale. The result of entry on such a scale may be a decline in prices, making it uneconomic to continue, or established firms may retaliate against the entrant by lowering prices. In these circumstances,

the entrant is not only being made to play the competitive game for high stakes, but, by being forced to enter on a large scale, he is virtually ensuring a swift competitive response by the established firms. *Procter & Gamble*, supra, p. 21,571.

On the other hand, if the entrant comes in at a scale small enough to be "unnoticed," he would be operating at a suboptimal level and have higher costs than established firms.⁶⁴

No such barriers are present as to insulated aluminum. Existing insulating companies can enter on a small scale or on a large one, depending on market conditions, with no capital investment whatever (Fdgs. 55, 56, R. 1294-95; e.g., R. 73-74, 251, 280-81, 379-80, 661-62, 983). Their efficiency is determined by their existing scale of operation and production techniques, not by the amount of aluminum used as conductor.

The significance which economists attach to economies of scale is indicated by Professor Markham's statement that "[t]he most important single determinant of the degree of competition in a given industry is the shape of the long-run cost curve confronting the prospective entrant." "Economic Analysis," Proceedings, Section of Antitrust Law, American Bar Association (April 1954), p. 149.

(iv) Uncertainty as to market conditions does not impede entry

Uncertainty refers to a potential entrant's lack of knowledge of the industry he might enter, and particularly lack of knowledge as to whether a profit can be made.

The more uncertain the prospects appear in an industry, the more imperfect will entry be and the greater may be the profits of the firms established in the industry, sheltered by the deterrent uncertainty.⁶⁵

No such difficulty besets existing insulators who may wish to "enter" the alleged insulated aluminum line of commerce. Since they are already in the insulating business, they know the cost and efficiency of the machinery and personnel to be used, and are fully conversant with customer requirements, there being no "distinct customers" for copper and aluminum insulated products (Opin., R. 1316; see e.g., R. 73).

(v) The effectiveness of easy entry is not impaired by entry lag

Even where there are no significant entry barriers, the time required to effect entry (i.e., "lag,") may limit the effectiveness of easy entry as a guarantor of vigorous competition. Thus:

[t]he longer the lag period in question, the less influence any given threat of entry will be likely to have on established sellers. . . . The effect of any given condition of entry on market behavior will therefore be likely to vary with the length of the entry lags which accompany it. 66

⁶⁵ Machlup, The Economics of Sellers' Competition 21; see 107, 228-230.

⁶⁶ Bain, Barriers to New Competition 11; See also Machlup, The Economics of Sellers' Competition 108.

Here, lag is nonexistent because "entry" is not only easy, but virtually instantaneous (e.g., R. 73-74, 379-80, 661-62, 982-83).

(c) Easy Entry Assures Vigorous Competition Among Existing Firms

As the foregoing makes plain, insulated aluminum is characterized by an extraordinarily easy condition of entry. One consequence of this is the high probability that in the future additional manufacturers will allocate part of their insulating capacity to aluminum. But this is not the only significance of easy entry, for where this condition prevails, vigorous and effective competition is assured even where no actual entry occurs.

First of all, where, as here, potential entrants exist and the market structure is favorable to entry, these conditions will bring about vigorous and effective competition among the existing firms (supra, p. 58). This very point is now being urged by the Government in United States v. Penn-Olin Chemical Company, No. 503, this term, where it argues:

The presence of a potential entrant—waiting in the wings and capable of moving into the market—may be an indispensable source of protection for purchasers and ultimately the consuming public. Its readiness to enter the market whenever the existing manufacturers charge excessive prices, limit production, or fail to exploit economic opportunities (e.g., to develop more efficient productive techniques) can act as a spur to insure the competitive vigor of those already in the market. "If

⁶⁷ As will be discussed below, this process is already under way (infra, pp. 68-69).

economic superiorities of some kind are not possessed by the existing few, entry of new rivals is a continuing threat, likely to enforce behavior approaching the competitive norm." Weston, The Role of Mergers in the Growth of Large Firms (1953) 109; Brief, p. 25.

Here, to a far greater extent than in the *Penn-Olin* situation, these conditions are satisfied, for there are numerous potential entrants, each able to "enter" the market with far greater ease than could the chemical concerns involved in that case.

Secondly, as Commissioner Elman has observed, "factors making for high entry barriers also make for domination of small competitors by large and so tend to eliminate actual as well as potential competition" Procter & Gamble, supra, at p. 21,572. Conversely, where entry retarding factors are absent, the market structure will favor effective competition among existing firms. Particularly important in this regard is product differentiation which is generally regarded as both an entry determinant and a market structure variable in its own right. 68

Where product differentiation is lacking, sellers will be forced to match the price reductions of rivals in order to hold their customers, and market shares will be determined not by systematic buyer preferences,

but at random or as a result of a past sequence of historical developments in the establishment and growth of firms. The individual firm is generally not well protected in its going share of the market by any specific structural conditions, and is potentially vulnerable to losses in proportionate con-

⁶⁸ E.g., Procter & Gamble, supra, 21,571; Kaysen and Turner, Antitrust Policy 74; Bain, Industrial Organization 210-221.

trol of the market because of the growth of other firms, their pricing policies and so forth. 69

As will now be shown, because of the absence of product differentiation and other competition retarding market characteristics, there is aggressive price competition with respect to insulated aluminum conductor products and suppliers of such products have been "vulnerable to losses in proportionate control of the market because of the growth of other firms . . ."

(d) Market Performance Demonstrates the Effectiveness of Competition In Insulated Aluminum Conductor

As noted, prediction of future economic conditions requires a coordinated evaluation of both market structure and performance. Here, examination of actual performance confirms what is so clearly indicated by the foregoing analysis of market structure, namely, that competition is vigorous and effective.

(i) There is active price competition

The district court found that there is vigorous competition among all manufacturers of insulated aluminum products (Fdgs. 62, 69, R. 1295, 1297; Opin., R. 1330). Such competition is manifested in price-cutting by both small and large firms. Alcoa lost millions of pounds of insulated aluminum business on a price basis to both small and large competitors, including such independent companies as Nehring, Southwire, General Cable, Central Cable, and Essex (AR 29). More-

⁶⁹ Bain, Industrial Organization 216.

⁷º During the same period, it lost virtually no aluminum conductor business to Rome (Fdg. 52, R. 1294; AR 58, R. 3409). AR 29, as well as AR 72 which is referred to below (pp. 68-69), is not in the printed record but is part of the original record filed with the Clerk.

over, the Government, itself has acknowledged the aggressive price-cutting practices of such firms as Central and Nehring (Govt. Br., pp. 62, 64).

The experience of utility companies in competitive bidding further demonstrates that price competition is not confined to the larger suppliers. In 1959, Circle Wire and Cable Company, too small to be listed by the Government among the 1958 sellers of insulated aluminum conductor (Govt. Br., p. 20), was awarded 22 per cent of Long Island Lighting Company's aluminum conductor business. Essex went from zero in 1959 to 29 per cent in 1960. In part, these gains were at the expense of Anaconda and Alcoa which dropped from a combined 66 per cent of Long Island's business in 1958 to 10 per cent in 1961 (AR 81, R. 3507). Similarly, when Central Illinois Public Service Company was dissatisfied with the price and other terms for aluminum triplex, it requested bids from two smaller suppliers. A considerably lower price and better terms were obtained, which eventually the larger suppliers had to match (R. 891-93). Overall, as a result of vigorous price competition, list prices of insulated aluminum products are substantially below what they

The Government's claim that the alleged insulated aluminum line of commerce is an "oligopolistic" market (Govt. Br., pp. 2, 37) is inconsistent with the admitted aggressive price cutting of small firms. In an actual oligopolistic market, small firms "tend to exist at the sufferance of their large rivals, and for that reason are likely to opt for peaceful coexistence—not vigorous competition—with those rivals." Procter & Gamble, supra, p. 21,569. Similarly, in Philadelphia Bank, this Court referred to the fact that in an oligopolistic market, "small companies may be perfectly content to follow the high prices set by the dominant firms . . ." Footnote 43, at p. 367.

were in 1953, and actual prices in the market place are still lower (R. 243, 399, 833, 1228-29; AR 29).

(ii) There have been significant shifts in market shares

The so-called "insulated aluminum" market has been characterized by significant ups and downs in market shares. Other examples, in addition to the declines suffered by Alcoa and Rome (Fdg. 45, R. 1292-93), are the shift of Southwire from 9th position, with 2.3 per cent, in 1955, to 4th, with 7.4 per cent, in 1956; the increase of Essex from a 7th ranking 4.9 per cent in 1957, to a 5th ranking 6.1 per cent in 1958; the move of General Cable from 7th place, with 5.8 per cent in 1956, to 3rd place, with 11.9 per cent in 1957; and the decline of Kaiser from 26.5 per cent in 1955, to 18.1 per cent in 1956 (Gx 436, R. 2717).

(iii) There has been significant entry

In terms of entry, too, the market has performed as the foregoing structural analysis would indicate: The court found that the abandonment of insulated aluminum products by several companies since 1956 resulted from the "vigorous competition in the products involved" (Opin., R. 1330). The Government argues that such abandonment, together with the fact that since 1955 only one company commenced the manufacture of insulated aluminum products, "dispel the significance of the court's finding that there is 'ease of entry' . . ." (Govt. Br., p. 55). The important fact, however, is not whether actual entry has occurred, but whether underlying conditions are conducive to entry (supra, p. 58). Here "there is no evidence which would indicate that any potential producer has been unable to enter the industry when he thought that

a profit could be made therein" (Opin., R. 1323). Indeed, on the basis of the "surge of new entries" experienced in the early 1950's, when rising copper prices increased the popularity of aluminum conductor products (Govt. Br., pp. 24-25, 54), and the industry practice of switching from less to more profitable products (Fdg. 56, R. 1294-95), there can be no doubt that if competition had been less intense, more entry would have occurred.

In any event, despite the vigorous competition, there has, been significant "entry." Hatfield Wire and Cable Division of Continental Copper & Steel Industries, Inc., known to be an aggressive competitor (R. 551). has begun making aluminum conductor products (AR 5, R. 3229); and subsequent to trial, too late to be noted in the record, Phelps Dodge, already an important wire and cable fabricator, with assets 18 times Rome's (AR 72), announced plans to offer a full line of aluminum conductor products." Moreover, while too insignificant to be listed by the Government as producers of insulated aluminum conductor products in 1958 (Govt. Br., p. 20), General Electric, with assets more than 100 times those of Rome, and Circle, whose parent company, Cerro Corporation, has combined assets 10 times as large as Rome's (AR 72), began to increase their shipments of such products in 1959 (Govt. Br., p. 20). There is nothing in the structure of the insulated aluminum conductor "market" to inhibit the further growth of these very substantial concerns, or to prevent other already

The Wall Street Journal, November 18, 1963. In the Government's terms, Phelps Dodge would be "entering" the alleged insulated aluminum line of commerce.

well-established insulating firms from "entering" the field. 12

⁷³ The following companies or their affiliates, with consolidated 1960 assets as shown, are among the wire and cable fabricators that are not included among the companies listed by the Government (Govt. Br., p. 20) as suppliers of insulated aluminum conductor in 1958 (AR 72):

m 1000 (1111 12) .	1960 Assets
American Enka Corporation (William Brand— Rex Div.) [AR 73, R. 3443]	\$ 100,416,720
Amphenol-Borg Electronics Corp. (Amphenol Cable & Wire Div.) [AR 73, R. 3442]	51,006,381
Cerro Corporation (Circle Wire and Cable Corp.) [AR 73, R. 3443]	249,410,118
Continental Copper and Steel Industries, Inc. (Hatfield Wire and Cable Div.) [R. 943;	
AR 73, R. 3445]	42,055,627
Electric Autolite Company [AR 73, R. 3444]	146,877,541
General Electric Company [R. 943; AR 73,	. 0
R. 3445]	2,522,249,000
H. K. Porter Co. (National Electric Div.) [R. 943; AR 73, R. 3447]	132,783,644
International Telephone & Telegraph Corporation (Royal Electric Div. and Suprenant Div.)	
[R. 943; AR 73, R. 3448-49]	383,296,277
Kennecott Copper Corporation (The Okonite Co.) [R. 943; AR 73, R. 3447]	807,554,096
Neptune Meter Company (Revere Corp.)	
[AR 73, R. 3448]	34,791,595
Phelps Dodge Corporation [R.943; AR 73, R. 3447]	426,968,025
Simplex Wire and Cable Co. [R. 943; AR 73, R. 3448]	24,535,020
Sprague Electric Company [AR 73, R. 3449]	47,535,846
Tennessee Corporation (Chester Cable Div.)	
[R. 943; AR 73, R. 3443]	92,811,785
Triangle Conduit and Cable Company [R. 943; AR 73, R. 3449]	32,190,895
United States Steel Corporation (American Steel and Wire Div.) [R. 943; AR 73, R. 3442]	4,626,800,000
Westinghouse Electric Corporation	
[AR 73, R. 3450]	1,521,138,112

Conclusion as to the Alleged "Highly Concentrated" and "Oligopolistic" Market in Insulated Aluminum Conductor. On the basis of the foregoing, it is abundantly clear that the bare concentration statistics mechanically applied by the Government do not adequately describe the nature of competition in the alleged insulated aluminum conductor line of commerce. The crucial "observable features of market structure," when correlated with "observed performance," establish that competition in this alleged line is effective and vigorous. As will now be shown, the Rome acquisition will not affect the prevailing vigor of competition.

- (3) The Acquisition of Rome Will Not Affect Market Structure or the Vigor of Competition in the Manufacture and Sale of Insulated Aluminum Products
- (a) The Acquisition of Rome Did Not and Will Not Change Pre-existing Market Structure

The Rome acquisition has not had and cannot have any effect on the condition of entry or product differentiation market structure variables discussed above. Here, unlike Procter & Gamble, where already high entry barriers were "markedly heightened by the merger" (supra, p. 21,579), the essential entry conditions are unchanged. As the court found, there is no reason to believe that anyone "has been or probably will be deterred from entering into the manufacture and sale of aluminum conductor wire and cable products because of this acquisition" (Fdg. 58, R. 1295).

Moreover, even in terms of the one structural variable emphasized by the Government, i.e., seller con-

^{4 74} Kaysen and Turner, Antitrust Policy 75.

centration, this acquisition is not substantial. Alcoa's share in 1958 was 11.6 per cent, and Rome's 4.7 per cent. The sum, 16.3 per cent, is not only far below the 30 per cent conservatively computed in *Philadel-phia Bank*, 374 U.S. at 364, but is substantially beneath the 20 to 25 per cent figures suggested as a test of *prima facie* unlawfulness by the economists cited in footnote 41 of that opinion. 374 U.S. at 364.

The impact, in bare statistical terms, becomes even more tenuous in light of the substantial post-acquisition decline from a combined high of 16.6 per cent in 1959 to 13 per cent in 1961. Thus, on the basis of the latest information available to the court, the market share of Alcoa-Rome combined is only 1.4 percentage points above the 11.6 per cent share held by Alcoa alone in 1958.

The acquisition's effect on the number and size distribution of firms in the alleged market as a whole is equally insignificant. Prior to the acquisition, Alcoa ranked third; after the acquisition, the Alcoa-Rome combination was still third, and still substantially behind Kaiser and Anaconda (Gx 436, R. 2717). Moreover, the aggregate share of the five integrated producers has remained virtually unchanged. From a combined 65.4 per cent in 1958, the same five companies at the end of 1961 accounted for 66.5 per cent, an increase of only 1.1 percentage points. Such increase in concentration not only is far below the 33 per cent increase deemed significant in Philadelphia Bank, but also is substantially below the 7 or 8 percentage point increase suggested by Professor Bok as a possible statistical test. Philadelphia Bank, supra, footnote 41.

Such a minute increase in "concentration," upon which the Government apparently relies (Govt. Br., pp. 56-57), could only have relevance if it adversely affected or eliminated the "possibility of eventual deconcentration" where "concentration is already great." Philadelphia Bank, 374 U.S. at 365, footnote Thus, in Procter & Gamble, supra, p. 21,583, already formidable barriers to entry were made "virtually insurmountable" by the acquisition, and, as a result, "virtually all possibility of an eventual movement toward deconcentration in the liquid bleach industry was eliminated." Here, in sharp contrast, insulated aluminum conductor is not concentrated in any meaningful sense of the word, entry barriers are nonexistent, and the acquisition, itself, has not changed the condition of entry (Fdg. 58, R. 1295). Moreover, as will now be shown, Rome, a steadily declining factor in insulated aluminum conductor, was among the least likely sources of "deconcentration."

(b) Rome Was Even Less Important Than Its Small Market Share Would Indicate

The Government contends that this acquisition eliminated substantial competition because Rome, though not large in absolute terms, had "competitive significance [that] transcends its bare market percentage" (Govt. Br., p. 60). This, the Government argues, was because it was one of only a few "effective firms in the industry" (ibid.), because it was an "aggressive competitor" and product innovator (Govt. Br., pp. 62-63), and because its presence in the market preserved "the possibility of eventual deconcentration" (Govt. Br., p. 64). These contentions misconceive both the nature of the alleged market and Rome's competitive role therein.

First, the assumption that there are only a "few significant competitive factors" in the insulated aluminum conductor field presupposes that this is a sharply delimited "industry" confined to the 11 or 12 companies each of which happened in a given year to account for one per cent or more of total insulated aluminum conductor shipments. This, of course, totally ignores the more than 200 established firms ready, willing and able to make insulated aluminum conductor products, including such substantial companies as Okonite, Westinghouse, Hatfield, General Electric, Circle, Triangle, American Steel and Wire, Crescent and Simplex, which, though still comparatively minor suppliers of insulated aluminum conductor, are, nevertheless, substantial concerns with a potentiality for expansion that would not ordinarily be true in the case of "fringe" competitors (supra. n. 73). Finally, the implication that there may be an inadequate number of companies is flatly refuted by the testimony of utility purchasing agents all of whom made clear that both before and after the Rome acquisition there were more than enough suppliers of insulated aluminum conductor products. (Opin., R. 1326, Fdgs. 59, 60, R. 1295; R. 721, 750, 801, 806, 810-12, 886-87, 893-94, 897-98).

Secondly, the court found and the Government concedes, that "Rome was not an aggressive price competitor" in the sale of aluminum conductor products (Fdgs. 53, 61, R. 1294-95; Govt. Br., p. 62). This is of critical importance, for, as emphasized by Kaysen and Turner, "the fact that the acquired company has been an active influence on prices" should be among the factors required in order to find illegality where, as here, market shares are "fairly small," i.e., a com-

bined percentage of less than 20 per cent. Seeking to overcome Rome's passive role and to inflate its competitive importance; the Government asserts that Rome was "shown to be an 'aggressive competitor'" and was a product innovator in the field of aluminum insulation (Govt. Br., pp. 62-63). It does not even attempt, however, to explain precisely how Rome could have been "aggressive," yet, as the court found, adhere "to the policy of not going below the prices of its competitors" (Fdg. 53, R. 1294).

Likewise, as shown earlier (supra, pp. 11-13), Rome's insulating proficiency, research activities and product innovation, all related to its line of sophisticated products, where "copper remains virtually unrivaled" (Govt. Br., p. 17), not to the two simple products in which aluminum has gained acceptance. The implication that Rome had developed an important insulated aluminum conductor product is misleading for the product in question was actually developed by Rome in the late 1940's using copper as the conductor metal (R. 936). There is no proof in this record that Rome has pioneered the develop-

⁵⁵ Kaysen and Turner, Antitrust Policy 133. The only other afactor singled out is "severe limitations on entry."

was, nevertheless, an "aggressive competitor" is based entirely on the statement of Rome's President, who, though acknowledging on the statement of Rome's President, who, though acknowledging that Rome was not a price cutter, asserted that it was an "aggrestive competitor" (R. 937). This, of course, was a perfectly natural statement for the President and one of the founders of the company to make. Utility purchasers who were in a position to compare the aggressiveness of Rome with that of other suppliers, testified "without contradiction that Rome was not an initiator of price reductions." (Fdg. 53, R. 1294).

ment of even a single insulated aluminum conductor product.

Finally, the Government's argument that the independence of Rome should be maintained in order to preserve the possibility of eventual deconcentration is wholly without substance. As shown in detail, insulated aluminum conductor is not "concentrated" or "oligopolistic" and there is no shortage of established insulating companies that can effect even further decentralization. Rome was one of the companies least likely to expand, for it was not an aggressive price competitor and, prior to the acquisition, had been a declining factor in insulated aluminum conductor, its percentage having fallen from 6.9 per cent in 1955 to 4.7 per cent in 1958 (Gx 436, R. 2717).

- For all of the foregoing reasons, it is clear that the Government failed to sustain its burden of proof on competitive effect with respect to the alleged insulated aluminum conductor line of commerce.
 - B. The Required Anticompetitive Effect Has Not Been Shown
 With Respect to the Alleged Aluminum Conductor Line
 of Commerce
 - (1) The Lack of Anticompetitive Effect as to Each Component Demonstrates the Absence of Such Effect as to the Alleged Composite Line

The Government's second alleged line of commerce is nothing but a mathematical composite of (1) insulated aluminum wire and cable, and (2) ACSR and aluminum cable, bare. With respect to item (1), the Government makes no claim of presumptive or per se illegality and, as just demonstrated, has failed to show anticompetitive effect. As to item (2), the Government has not even appealed from the district court's

conclusion that the prohibited effect was not shown. Since the Government concedes the absence of prohibited effect in bare aluminum, which constitutes more than 90 per cent of Alcoa's share, and 77 per cent overall, of this alleged line of commerce (Govt. Br., p. 11), and has shown no prohibited effect as to insulated aluminum, it is nothing short of incredible to claim that the requisite effect can somehow emerge when bare and insulated aluminum conductor are lumped together.

(2) The Market Percentages on Which the Government Relies Are Devoid of Economic Significance

With due respect, we submit that the Government's composite line is simply a numerical trick, calculated to give the appearance of substantiality where the market facts and industry testimony demonstrate that none exists. As noted above, Alcoa's 27.8 per cent of this composite line was more than 90 per cent bare aluminum conductor, while Rome's very minor 1.3 per cent consisted almost entirely of insulated aluminum products (supra, p. 47). Since bare and insulated products are not even claimed to be competitive, and since the combination was found not to constitute a recognized economic entity or submarket (Add'l. Fdg. 4, R. 1336), the combination of the two is utterly without economic or competitive significance. Certainly, in these circumstances, the combined percentage of 29.1 per cent does not manifest the "inherently anticompetitive tendency" which this Court found justified reliance upon a rebuttable presumption of illegality based on market shares in the Philadelphia Bank case, 374 U.S. at 363.

Moreover, the Philadelphia Bank presumption applies to "a merger which produces a firm controlling

an undue percentage of the relevant market . . . " (emphasis supplied). In this case it is pure fiction to suggest that this acquisition "produced" the 29.1 per cent figure on which the Government relies. This percentage, as noted, predominantly represents Alcoa's pre-acquisition sales of bare aluminum cable. As such, it is nothing but a point on a steady downward curve reflecting the sharp and continuing erosion of Alcoa's position in bare aluminum cable which has fallen from 48.4 per cent in 1954, to 32.5 percent in 1958, and, combined with Rome, to 26.1 per cent in 1961 (supra, p. 6). Because of Alcoa's subordinate role in insulated aluminum conductor, the percentages are somewhat smaller in the composite line, but the identical trend is disclosed: from 42.8 per cent in 1954, to 27.8 per cent in 1958 and, combined with Rome, to 24.8 per cent in 1961. Thus, by the time of trial the Alcoa-Rome combined share in the alleged composite line was more than 40 per cent below that held by Alcoa alone in 1954, and more than 10 per cent below Alcoa's percentage in .1958, the last full year before the acquisition.

Attempting to minimize the significance of these sharp declines, the Government, quoting from Commissioner Elman's opinion in *Procter & Gamble*, suggests that post-acquisition declines "are entitled to little, if any, significance" because a company "'may deliberately refrain from anti-competitive conduct . . . and build, instead, a record of good behavior . . '" (Govt. Br., p. 59). This argument has no relevance to this case. Although the Government states that the district court relied on the decline of the merged companies "subsequent to the acquisition" (Govt. Br., p. 59), the fact is that the court repeatedly emphasized the "generally continued" market share declines "both pre and

post-acquisition" (Opin., R. 1324, 1313; Fdg. 45, R. 1292-93). Thus, contrary to the implication of the Government's argument, Alcoa's post-acquisition decline is but a continuation of a trend started long before the acquisition, a fact which demonstrates that market forces, rather than a desire to build a good record for this proceeding, accounted for the decline."

In light of its obviously contrived nature, the failure of proof as to the bare and insulated components, and the substantial and continuing decline in the Alcoa-Rome market share, the Government's claim of illegality as to the alleged aluminum conductor line of commerce is wholly without substance. This conclusion is reinforced by examination of market and historical factors which affirmatively establish the acquisition's lack of effect in either of the alleged aluminum conductor lines of commerce.

C. Market and Historical Factors Found by the Court Affirmatively Establish That Anticompetitive Effect Has Not Been Shown

Where market share statistics are not conclusive, determination of the competitive effect issue requires "an examination of various economic and historical factors..." Brown Shoe, 370 U.S. at 329. Several of such factors—Alcoa's downward trend, the complete ease of entry, the absence of product differentiation, Rome's passive role in price formation and declining position, the lack of significant competition between Alcoa and Rome, the continued vigor of competition—have already been discussed. We turn now to other economic and historical factors that also affirmatively

⁷⁷ Furthermore, although there was extensive pre-trial discovery and virtually every Alcoa official concerned with the post-acquisition operation of Rome was exposed to cross-examination at the trial, there is not even a hint in this record of any attempt on the part of Alcoa to build a record for the purpose of this proceeding.

establish that this acquisition will not have the prohibited anticompetitive effect.

(1) There Has Not Been, and Will Not Be, Any Adverse Effect on Competitors

While Section 7 is concerned primarily with effect on competition, rather than on competitors (Philadelphia Bank, 374 U.S. at 367, n. 43), in some cases an acquisition's effect on competitors may be so severe as to create a probability that competition as a whole will be substantially lessened. (See e.g., Brown Shoe, 370 U.S. at 344). This, emphatically, is not such a case. At the trial, independent wire and cable manufacturers, most of them Government witnesses, testified as to competitive conditions. Not a single such witness had either experienced, or foresaw in the future, any adverse effect as a result of this acquisition (Fdgs. 50, 62, R. 1294-95). Indeed, several of them had increased their aluminum wire and cable sales since the acquisition, and had either built new plants, or expanded existing plants, in order to increase their capacity for making such products (Opin., R. 1330; R. 74-76, 228, 381, 404-06, 984-85, 990). Moreover, in the three years since the acquisition, independent manufacturers, as a group, increased their sales of insulated aluminum wire and cable by more than 50 per cent, with a corresponding increase in their combined market share from 29.8 per cent in 1958 to 33.5 per cent in 1961 (Opin., R. 1329).

(2) Alcoa's Purpose Was to Obtain Insulating Capability, Not to Expand Its Aluminum Conductor Facilities

Although the Government implies that Alcoa's purpose was to "augment" its already leading position in aluminum conductor (Govt. Br., p. 61), this is contrary to the court's express finding that the purpose was to secure insulating capability and diversification,

and that the acquisition was not induced by "Rome's manufacture of aluminum products . . ." (Fdg. 7, R. 1284). These findings are relevant in a Section 7 case, for, as this Court noted in *Brown Shoe* (370 U.S. at 329, n. 48):

evidence indicating the purpose of the merging parties where available, is an aid in predicting the probable future conduct of the parties and thus the probable effects of the merger.

Here, the findings as to purpose repudiate the Government's claim that Alcoa sought to "expand" its aluminum conductor operations (Govt. Br., p. 68).

(3) There Is No Significant Merger Trend

Contrary to Brown Shoe, where this Court found definite and substantial acquisition trends in which Brown Shoe, itself, was a "moving factor," 270 U.S. at 302, the Court here found neither a "significant pattern or trend of mergers" for the industry as a whole (Fdgs, 46, 49, R. 1293), nor any prior "history of acquisitions or mergers" involving aluminum conductor by Alcoa (Opin., R. 1322).

The court's findings as to the lack of any significant merger trend are strongly supported by the record. The so-called trend consists of the following: Olin-Mathieson, which was not even in the wire and cable business, acquired Southern Electrical; U.S. Rubber, which was never more than an .8 per cent factor in aluminum conductor products, was acquired by Kaiser in 1957; and Roebling, which never was more than a .1 per cent-factor and is conceded by the Government to have been an insignificant competitor (Govt. Br., p.

⁷⁸ The post-trial acquisition of Central Cable by Alaminium Limited, which is referred to by the Government, also did not eliminate or lessen competition since Aluminium was not previously in the wire and cable business.

69), sold some of its used wire and cable machinery to Reynolds (Gx 392, 393, R. 2613-18).

While purporting to acknowledge the underlying facts and not wishing "to overdraw the picture" (Govt. Br., p. 68), the Government urges that these acquisitions were "major step[s] towards the elimination of all independent concerns" (Govt. Br., p. 65), and that "there is reason to apprehend that the remaining independents will eventually be absorbed and the market occupied exclusively by the integrated giants." (Govt. Br., p. 71). This inflammatory, ad terrorem argument is wholly without basis in fact.

Not only did none of the prior acquisitions eliminate any substantial competition, but none involved an attempt to expand aluminum conductor operations. Alcoa's purpose has just been discussed, and Reynolds, too, was seeking insulating capability required in order to make its product line more competitive (Gx 387, R. 2606). Similarly, the effect of Kaiser's acquisition of U. S. Rubber was to place it in a position to offer insulated copper products (R. 1080-81). Thus, all

⁷⁹ The Government concedes that the Olin-Southern and Aluminium-Central acquisitions eliminated no actual competition. It argues, however, that potential competition was eliminated because "the electrical conductor field is one to which [the primary aluminum producers] would naturally gravitate" (Govt. Br., pp. 69-71). In fact, there is no evidence that any aluminum producer has been able to acquire insulating capability through internal growth. The Government's assertion at this point in the Argument, as in the Statement of Facts, that Alcoa "was prepared to embark upon a large program of internal expansion" does not faithfully reflect the facts of record. As noted, the court found that the time and expense involved "seemed to foreclose" the possibility of Alcoa's obtaining insulating competence from within (supra, p. 9). It is ironic that the Government should stress the potential competition of primary aluminum producers not even in the insulating business, yet ignore the literally dozens of already existing insulating concerns that could so much more easily commence the fabrication of aluminum conductor products.

three acquisitions were actually a competitive reaction to the fact that many companies with broad experience in the insulating business had begun to manufacture aluminum conductor products (supra, pp. 8-9). They were not, as the Government would imply, attempts to "expand" within the field of aluminum conductor, but were for the purpose of securing insulating know-how.

In these circumstances, unlike the situation in Brown Shoe, where shoe manufacturers had economic incentive to engage in a seemingly endless program of "drying up" available outlets (370 U.S. at 301), here the acquiring company's economic incentive is extinguished once it has acquired insulating capability. Thus, explaining Alcoa's lack of interest in future acquisitions, its Executive Vice President testified: "Alcoa was seeking know-how in this insulated wire business and we were satisfied Romé had it and we were not about to buy it twice" (R. 1110; see also R. 1087, 1105). Reflecting this testimony and the commercial background of the acquisition, the court found that the Rome acquisition was not shown to be "part of a continuing program contemplating future expansion through mergers or acquisitions . . ." (Fdg. 11, R. Since the same appears to be true as to the other minor acquisitions, the Government's concern about the extinction of independents through further acquisition by primary aluminum producers is unfounded (See Govt. Br., pp. 66-67).

so As throughout its Brief, the Government, of course, assumes that there is a closely limited, static group of aluminum conductor fabricators, and that only those supplying more than a given percentage of the market at any one time can qualify as "significant independents." There are, however, as noted above, substantial concerns such as General Electric, Circle, Phelps Dodge, and Hatfield which are in the process of commencing or expanding the production of aluminum conductor products and, of course, numerous others in a position to do so if market conditions warrant.

(4) There Has Not Been, and Will Not Be, Any Adverse Effect on Consumers

Recognizing that one test of a competitive market is "whether consumers are well served" Philadelphia Bank, 374 U.S. at 367, n. 43, appellees offered the testimony of purchasing agents for 8 of the 10 public utili-·ties which bought aluminum conductor products from both companies prior to the acquisition. These witnesses explained in detail the manner in which they purchase these products, identified their suppliers before and after the acquisition, and described Rome's policies and practices. As the court found, these witnesses "all testified without exception that the acquisition has not had an adverse effect upon the purchasers of such products;" that "no difficulty has been encountered in expanding their list of suppliers and that competition among such suppliers has not been affected" (Opin., R. 1326); and that prior to the acquisition, Rome was a follower rather than an initiator of price reductions (Fdgs. 53, 61, R. 1294-95). On the basis of this and other evidence, the court found that consumers "have not been and will not be adversely affected by the Rome acquisition" (Fdg. 59, R. 1295).

CONCLUSION)

For all of the foregoing reasons, the district court correctly ruled that the Government had failed to sustain its burden of proof on either the line of commerce or competitive effect issues, and its judgment dismissing the Complaint should be affirmed.

Respectfully submitted,

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Attorneys for Appellees

April 9, 1964

APPENDIX

The exhibits in the record were admitted as follows:

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[•] By Stipulation filed with the Court on November 6, 1963 the parties agreed that Gx 442 was admitted into evidence by the district court.

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